The Constitution of Partnering

A Foucaldian analysis of dispositives, space, and order in Danish construction

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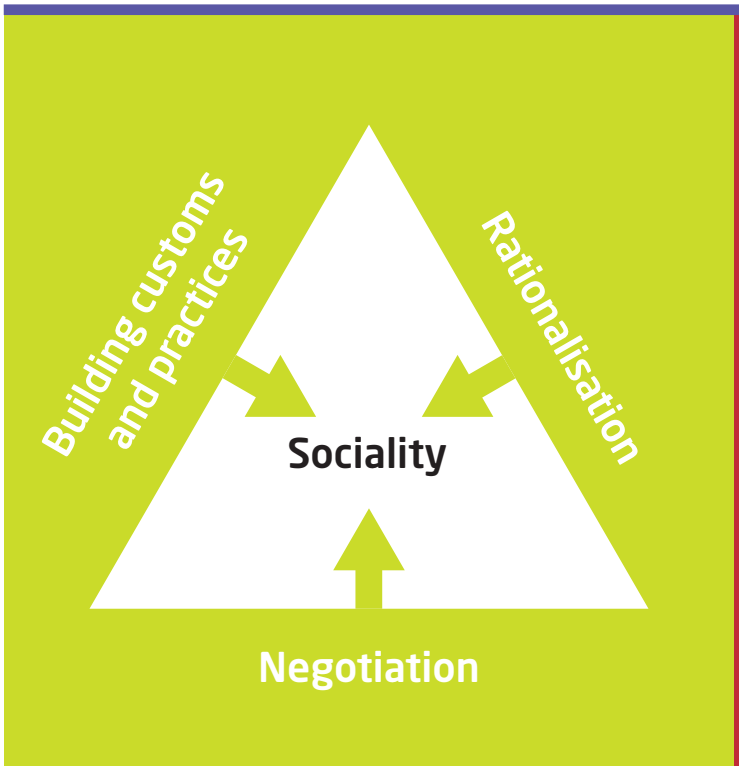

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TECHNICAL UNIVERSITY OF DENMARK
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Preface

This dissertation is submitted in partial fulfilment of the requirements for the degree of PhD at the Technical University of Denmark. The studies have been completed with finance from the Danish Building Research Institute (SBi), Aalborg University, the Technical University of Denmark (DTU), and the Ministry of Science, Technology and Innovation. The project was started March 2006 and finished April 2009.

This study makes no claims to contribute with practical or theoretical findings on neither how to improve the productivity of the construction industry in general nor the efficiency of the construction process in specificity. Rather, the focus of the study has been twofold. In the first instance, it has been to develop an understanding of how to explore highly polyvalent social phenomena without resorting to reductionism. Secondly, within this framing, the study has focussed specifically on the concept of partnering in Danish construction with emphasis on the historical conditions for understanding the current sociality of the sector. A *Foucauldian* framework is used for analysing partnering as a contemporary form of management and organising in Danish construction; as a *dispositive*.

There are several people I would like to thank, who in some way or other have contributed to the making of project. My supervisors Christian Clausen, Kim Haugbølle and Christian Koch deserve special mentioning: Christian Koch for introducing me to the world of research and being there all the way. Christian Clausen for taking over the reigns at such short notice and providing excellent feedback. Kim Haugbølle for providing the opportunity for the study, for challenging me with relevant as well as irrelevant thoughts, for being a good friend and adversary, and for putting up with me. There are also other people that must be mentioned. In fear of forgetting someone, who deserves to be mentioned, I would nevertheless extend my thanks to:

– Friends and colleagues from the Department of Construction and Health at SBi and the Section for Planning and Management of the Built Environment at the Department of Management Engineering, DTU.

– Peter Kjær, Kristian Kreiner and numerous others from the Department of Organization at Copenhagen Business School for hospitality and input during my stay there.
– Special thanks to Niels Haldor Bertelsen without whom this study would never have been and to Jens Stissing Jensen for the sharing of office and strange thoughts through 1½ years.
– Everyone I have interviewed, observed, or otherwise bothered in the course of the study, especially those involved in the U2 project. I hope for your forgiveness as to the descriptions and conclusions I have drawn.
– My son Linus for being my anchor to reality and the world outside the study.

This being said and done, I feel compelled to state that I of course take sole responsibility for anything written in this dissertation – errors and omissions included.

Stefan Christoffer Gottlieb
Copenhagen, April 2009

Contents

Dansk resumé

Denne afhandling er udarbejdet som led i betingelserne for at opnå ph.d.-graden ved Danmarks Tekniske Universitet. Afhandlingen er resultatet af et ph.d.-studium gennemført i perioden marts 2006 til marts 2009 ved DTU Management, Sektionen for Planlægning og Ledelse af Byggeri samt ved Statens Byggeforskningsinstitut, Aalborg Universitet, Afdelingen for Byggeri og Sundhed.

Afhandlingens engelske titel 'The constitution of partnering' refererer til den dobbelttydighed, der er det centrale omdrejningspunkt for studiet. På den ene side undersøgelsen af fremkomsten og udviklingen af partnering. På den anden side det konstitutive element i partnering – at partnering kan ses som en anordning, der er bestemmende for givne sociale udfald. Eller med andre ord: konstitueringen af partnering henholdsvis de konstitutive effekter af partnering. Afhandlingens undertitel 'A Foucauldian analysis of dispositives, space, and order in Danish construction' skærper tonen og illustrerer afhandlingens særlige fokus på Foucaults dispositiv som en nøgle til forståelse af partnering.

Afhandlingen består af i alt 11 kapitler samlet i fire hoveddele. I afhandlingens første del introduceres problemstilling, teori, analysestrategi samt metodiske overvejelser. Kapitel 1 præsenterer baggrunden for afhandlingen, ligesom der på indledende niveau redegøres for valg af teoriramme/analysestrategi. Der argumenteres for velegnetheden af Foucaults begreb om *dispositivet* som overordnet ledetråd i studiet af polyvalente fænomener, hvis reduktionisme skal undgås. Herefter diskuteres kort en række overordnede konsekvenser i forbindelse med valget af en såkaldt post-strukturalistisk teoriramme. I kapitel 2 tages derefter hul på en udredning af Foucaults begreb om dispositivet. Der argumenteres især for, at dispositivanalysen skal ses som en videreførelse af Foucaults arkæologiske respektive genealogiske projekter snarere end som et brud med disse. Således vises det, at Foucault allerede i sit arbejde med vidensarkæologien havde mere end åbnet døren for en analyse af det ikke-diskursive – og dermed dispositivet. Herefter fokuseres specifikt på dispositivanalysen som en kritisk historiografisk analyse af sociale teknologiers spredning og samspil. Sociale teknologier skal i denne henseende forstås som måder at regulere individers adfærd og handlen. Med det

analysestrategiske blik etableret, diskuterer jeg i kapitel 3 implikationerne heraf for den måde, hvorpå jeg kan angribe mit studium og det empiriske felt. Jeg diskuterer således studieobjektets de-ontologisering og dekonstruktion som grundlag for en forståelse af, hvordan post-strukturalistisk forskningsinterviews og etnografisk feltstudium kan bedrives.

I afhandlingens anden del tages hul på en omfattende historisk analyse af dispositiver i byggeriet. Kommende fra Foucault, er afsættet for denne 'skolastiske' øvelse, at hvis vi skal kunne gøre os forhåbninger om at etablere en kritisk forståelse for, hvordan vores samtid opererer, er vi nødt til at forstå dens historiske ophav. Udgangspunktet for denne forståelse er den fundamentale erkendelse, som Foucault deler med Nietzsche og Heidegger, at mennesket *er* historisk. Kapitel 4 slår kort tonen an for den følgende analyse, som i kapitel 5 koncentrer sig om 'byggeskikken' som det diagrammatiske, dvs. det fremherskende, underliggende mønster for social interaktion i det tidlige byggeri. I kapitel 6 etableres et brud, og efterkrigstidens rationaliseringsbestræbelser analyseres. Det vises her, hvordan den nyetablerede *sektor* grundet på en teknisk-naturvidenskabelig rationalitet afstedkom en omsiggribende funktionel differentiering, i hvilken eksisterende praksisser, materialer og aktører blev underkastet et normerende blik, der havde ideen om det 'optimale' som ledetråd. Ved at trække på Foucaults begreb om disciplinen vises det, hvordan denne funktionelle differentierings logik kan forstås som en stratificering af tiden og rummet. At helheden skal planlægges ved at tilrettelægge delene og forudbestemme deres handlinger. Vi kan forstå det som en optimering af helheden vha. en optimering af delene – som et forsøg på at eliminere tilfældigheder og få det planmæssige til at ske som Jensen (2007) ville sige det. Dette kan ses i datidens lovgivninger, materialeudvikling, institutioner og ikke mindst ledelsesrationalitet, hvor fasemodellen argumenteres at konstituere idealbilledet på en politisk teknologi – på den strategiske kodificering af de mikrofysiske magtrelationer i feltet. I kapitel 7 etableres endnu et brud, idet der argumenteres for, at vi fra 1990erne og frem er vidner til et gryende brud med stratificeringen som det dominerende mønster for social interaktion i byggeriet. Det argumenters, at vi i stedet for står over for en erkendelse af den centralistiske enhedsplanlægnings utilstrækkelighed. Problemet med koordination, som den funktionelle differentiering havde konstitueret som ledelsesfokus, skulle nu 'kortsluttes' ved at forskyde spørgsmål og praksisser vedrørende planlægning, beslutning og kontrol til det praktiske arbejdes udførelse. Med partnering som mastercase, beskrives denne udvikling som en proces, der først

og fremmest kom i stand ved at gennemsætte en såkaldt undtagelseslogik på politisk/institutionelt niveau. Det vises således, at de elementer vi forbinder med partnering, fx økonomiske incitamenter, valg af samarbejdspartnere, konfliktløsningsmodeller, fælles aktiviteter, etc., hver især kan ses som bidrag til at sætte en eller flere oplevede uhensigtsmæssigheder ved den såkaldt stratificerede socialitet ud af spil. Således rekonstrueres partnering konceptuelt som en nullificering af det traditionelle, eller med de begreber der anvendes i afhandlingens tredje del: en udglatning af det stratificerede rum. Implikationen heraf er i første omgang, at partnering træder frem som en kontinuerlig åbning af rum for handling og meningstillæggelse, idet handlinger ikke er entydigt bestemt.

På denne baggrund undersøges det i tredje del af afhandlingen, hvorledes denne logik aktualiseres i et konkret projekt. To centrale koncepter behandles i denne forbindelse, nemlig: rum og social orden. I kapitel 8 sættes det overordnede projekt i scene, og med udgangspunkt heri undersøger jeg i kapitel 9 en række begivenheder i aktualiseringen af partnering med udgangspunkt i rum-begrebet. Argumentet er, at partnering, gennem en problematisering af *hierarkiet*, på dette konkrete projekt aktualiserer et *glat rum*, som igen aktualiserer fleksibilitet, udlicitering af kontrol og individuel ansvarlighed som midler til at håndtere problemet om social orden. Derefter fokuserer jeg i kapitel 10 på at demonstrere, hvad der sker når en hævdvunden eller i hvert fald meget totaliserende social orden destabiliseres. Det vises, hvordan man som følge af den nedbrydning af faste strukturer og roller som partnering fører med sig, forsøger at installere individuel ansvarlighed og ejerskab som centrale styringsmekanismer ved at anvende en række sociale teknologier, der alle har normaliserende, snarere end normerende effekter. Afholdelsen af kick-off workshops beskrives i dette lys som en social teknologi, der har til formål at programmere det ny ideal om social orden hos deltagerne. Herefter undersøges, hvordan dette ideal søges sat igennem i det daglige arbejde i projektets byggemøder og benchmarkingaktiviteter. Det vises, hvordan dette arbejde har til formål at forsøge at etablere en homogen platform for handlen, der ikke er baseret på planlægningens foruddiskonterende rationalitet.

Afslutningsvist, i fjerde del af afhandlingen, er de sammenfattende konklusioner gengivet i kapitel 11. Her hævdes, det at partnering som et dispositiv eller social teknologi etablerer et rum for intervention inden for hvilket, der pågår lokale forhandlinger rettet mod at (re-)etablere en social orden. Dette sker i forsøget på at håndtere spændingen mellem en traditionel stratificeret socialitet, der optræder med

en commonsense status, og en ny glat socialitet i hvilken cirkulation, selvstyring, individuel ansvarlighed og ejerskab er mere centrale end entydighed, planlægning og kontrol. Endvidere diskuteres forholdet mellem magtens makro- og mikro-fysik kort.

Abstract

This dissertation has been submitted in partial requirements for the PhD degree at the Technical University of Denmark. The dissertation is the result of a study entitled 'Interorganisational knowledge processes in construction. Knowledge and practice in partnering.' The study has been conducted from March 2006 to March 2009 at DTU Management, Department for Management Engineering, Section for Planning and Management of the Built Environment, and at The Danish Building Research Institute, Aalborg University, Department for Construction and Health.

The title of the dissertation 'The constitution of partnering' refers to the duality that is the central concern of the study. On the one hand, the examination of the emergence and development of partnering and on the other hand the functioning of partnering. Or in other words: the constitution respectively the constitutive effects of partnering. The subtitle 'A Foucauldian analysis of dispositives, space, and order in Danish construction' sharpens the tone and illustrates the special attention on Foucault's *dispositive* or apparatus as the key to an understanding of partnering.

The dissertation consists of 11 chapters collected in four main parts. In the first part the problem and field of research, analytical strategy and methodological considerations are introduced. Chapter 1 presents the background for the study, and the choice of theoretical frame/analytical strategy is discussed preliminarily. I argue for the appropriateness and applicability of Foucault's concept of the dispositive as a main route to the study of highly polyvalent phenomena if reductionism is to be avoided. In extension hereof a short discussion concerning the implications of following a post-structuralistic analytical strategy is highlighted. In chapter 2 Foucault's concept of the dispositive is subjected to inquiry. It is argued that the dispositive analysis has to be seen as a continuation, rather than a replacement, of Foucault's archaeological and genealogical projects. It is thus shown that Foucault in his work with the knowledge archaeology had more than opened the door for the analysis of the non-discursive – and thus the dispositive. From here on, I focus specifically on the dispositive analysis as a critical historiographic analysis of the dissemination and interplay of social technologies; social technologies understood as ways of regulating the conduct of people. With the theoretical gaze established, in

chapter 3 I discuss the implications hereof in relation to my study and the empirical field in general. I discuss the de-ontologisation and deconstruction of the object of the study as a basis for establishing an understanding for how to conduct post-structuralist interviews and field research.

The second part of the dissertation is concerned with the historical analysis of dispositives in Danish construction. Coming from Foucault, the starting point of this exercise is that if we are to establish a critical, rather than a commonsense, understanding of current practices and forms of management and organisation, we have to understand their historical origins. The basis of this kind of thinking is the fundamental realisation, which Foucault shares with Heidegger and Nietzsche that man *is* historical. Chapter 4 sets the tone for the analysis, which in chapter 5 concentrates on the notion of 'building customs and practices' as the diagrammatical, i.e. the predominant underlying pattern for social interaction, in 'early' Danish construction. In chapter 6, I establish a break and the post-WW2 rationalisation efforts are analysed. Here it is demonstrated how the newly established notion of *the construction sector*, founded on a technical-scientific rationality, gave rise to a pervasive functional differentiation, in which existing practices, material and actors was subjected to a gaze of *normation* owing to the normative ideal of the optimal. By drawing on Foucault's notion of the discipline it is shown how the logic of this functional differentiation can be understood as a stratification of time and space; that the unity is planned by arranging the parts and predetermining their actions. We can understand this as an optimisation of the totality through an optimisation of the parts – as an attempt to eliminate contingencies and make the planned happen, as Jensen (2007) would put it. This can be seen in e.g. the laws, materiality, institutions and not least management rationality of the time, where the phase model is argued to constitute the ideal figure of political technology; of the strategic codification of the micro-physical relations of power in the field. In chapter 7, another rupture is established, in that it is argued that we from the 1990s onwards are witnessing a dawning break from stratification as the dominant pattern for social interaction in Danish construction. It is suggested that we instead are facing an acknowledgement of the centralistic unitary-planning's insufficiencies. The problems of coordination that the functional differentiation had constituted as the focus of governance now had to be 'short-circuited' by displacing questions and practices of planning, decision-making and control to the sphere of the practical work. Using partnering as the master-case this development is

described as a process, which first and foremost took place by enforcing a so-called logic of exemptions on a politico-institutional level. It is thus demonstrated that the elements or concepts we associate with partnering, e.g. economic incentives, the freedom to choose work partners, conflict resolution models, common activities etc., each and one can be seen as contributing to the 'sidelining' of one or more perceived inconveniences of the so-called stratified sociality. As such, partnering is reconstructed as a nullification of the traditional, or a smoothing out of the stratified space. The implication hereof is, in the first instance, that partnering emerges as a continuous opening of a space for action and attribution of meaning, as actions are not unequivocally pre-determined.

On this basis, the third part of the dissertation inquires into the actualisations of this logic in a specific building project. Two central concepts are treated: space and social order. In chapter 8, the specific project is staged, and in chapter 9, a series of events in the actualisation of partnering is examined, drawing on the notion of space. The basic argument is that on this project, partnering, through the problematisation of *hierarchies*, actualises a smooth kind of space, which again actualises flexibility, outsourcing of control, and individual responsibility as central means in the handling of social order. Then in chapter 10, I look into what happens when an established, totalising social order is destabilised. It is shown how efforts, as a result of the breaking-down of fixed structures and roles that partnering entails, are directed towards installing individual responsibility and ownership as central governance mechanisms by means of deploying social technologies with normalising effects. The conduct of workshops is described in this light as a social technology that aims at 'programming' the new ideal social order into the conducts of the participants. From here on it is examined how this ideal is sought instigated in the daily sphere of the project through the use of practices of staged co-presence of actors and benchmarking. It is shown how these activities and practices aim at establishing a homogenous platform for action, which parts with the predetermining rationality of the planning-ideal.

Finally, in part four, the conclusions of the study are presented in chapter 11. Here I advance an understanding of partnering as a dispositive that establishes a space for interventions within which local actions are conducted in order to (re-) establish a social order. This takes place in the efforts to handle the tensions between a traditional stratified sociality, with its commonsense qualities, and a 'smooth' sociality in which circulation, self-governance, individual responsibility and

ownership are more important than unambiguity, planning and control. Furthermore the relationship between the macro- and micro-physics of power is discussed.

Part I: Partnering and the dispositive

1. Introduction

How has partnering as a contemporary, predominant system of governance been established? Where do its concepts about collaboration, trust and mutuality come from? Which considerations and problematisations are partnering an answer to? And which role does a historical analysis of emergence play? This chapter presents the background for, and purpose of, the present PhD dissertation. It will highlight the motivation of the study as well as point to the relevant theme of inquiry, which will be followed in the course of the project. It will furthermore argue, although only in introductory terms, for the choice of theoretical and analytical framework, which will be further substantiated throughout the remainder of the thesis. Finally, the structure and contents of the dissertation will be presented.

1.1 Background

When the Danish government and the Danish construction companies promote the concept of partnering and call for changed working climate in which trust, mutual understanding, and openness play integral roles in the project processes, it is not so much in a quest for turning the construction site into a pleasant place to be. Admittedly, it seems to be a legitimate goal to pursue as a construction project often is described by applying terms such as *claimsmanship*, *conflict-ridden* or even *adversarial*; however the current agendas reach far beyond the regards for the well-being and job satisfaction of the project employees. Instead these agendas are embedded in a larger discussion on how the construction sector, both as a macroeconomic phenomenon as well as collection of companies, can improve and develop its productivity to match that of other industrial branches as well as that of other European countries.

Being backwards, locked-in and traditional

The Danish construction sector is often described as a *backward* sector when compared to other industries. It is said to be riddled by many serious problems, which in a Danish context is attributed to the fundamental organisation of the industry characterised by specialisation of trades, temporary project settings, strong

division of labour, separation of design from production and competition on costs rather than optimisation of client values (Thomassen, 2004). The sector has been described as facing a *lock-in* situation in which *traditional* or time-honoured practices, process technologies, qualifications and forms of organisation has established a cultural and social hegemony, which has to be broken for the sector to advance into the 21st century (ATV, 1999). Partnering, or indeed collaborative measures in general, have been promoted as a way out of breaking the deadlock.

Partnering

Partnering was initially seen as a long-term collaborative effort between a group of companies, for the duration of two or three construction projects, in which incentives agreements were said to bring benefits to clients and companies alike (EfS, 1993). In the course of the following years partnering gradually evolved into a single-project strategy based on an idea of dialogue, trust and openness (Gottlieb, 2008). The underlying rationale or assumption is that the above inadequacies of the construction process can be overcome through more collaborative ways of working by seeking closer relationships between parties to a project than traditionally has been the case in Danish construction.

Speaking from a general point-of-view the Danish understanding and application of the concept is characterised by a widespread ambiguity, in which partnering to some extent is used synonymous with a variety of other presumably different forms of cooperation, e.g. Lean Construction and Public-Private-Partnerships. Moreover, and as previously stated, different agents, from governmental agencies and semi-public bodies to industrial organisations and construction companies promote different policies, definitions and applications of the concept of partnering.

Head of secretariat for the Danish Association of Construction Clients (DACC) Henrik L. Bang (Bang, 2005) has raised a critical voice in the prevailing enthusiastic debate on partnering in Denmark. Bang (2005: 14) thus states that the reasons for DACC to enter the public debate and promoting their own partnering policy is the concern that partnering may get a bad reputation if the concept is continually touted by single companies whose flagship projects founder. Bang calls for more open, investigative and nuanced debate on the critical aspects of partnering as well as a more profound understanding of the concept of partnering as he believes that partnering has the potential of developing into a catalyst for the establishment of a new collaborative culture, which can help construction sector to break away from

many of the existing problematic issues. At the same time it is however warned that the development of such a partnering practice constitutes a gigantic social experiment with room for many possible missteps (Ibid., 2005: 19).

1.2 Framing the research field and problem

This thesis investigates the specific development of partnering in a Danish context, addressing partnering from the point of *change and constitution* as well as from its *social functioning*. In doing so, I will make use of a so-called dispositional analysis, which in combining Foucault's analytics of archaeology and genealogy focuses on the way:

> *"…social dispositives develop through our social interaction and come to define – or organise – what we are able to do." (Raffnsøe, 2003: 27).*

This will be elaborated further below; however for the moment being I will make a few comments on the development of the research field, as it has evolved throughout my studies – and why I have landed with the dispositive as the central analytical concept.

Constructing the field

Although the overall research field of this dissertation (partnering) has remained the same from the original idea/application to this final dissertation, many changes have occurred throughout the process – some minor some quite substantial. Thus, as I first embarked on this *voyage*, I stated the following hypothesis in my scholarship application: "…*that in order to understand the concept of partnering, it is necessary to exceed the narrow project context in which partnering is seen as a supplement to the project management 'toolbox'*" Rather, I proposed that study of partnering should emphasise the interplay of project governance and work practice, addressing aspects of *i.a.* project governance, inter-firm and intra-firm co-ordination and the intersection of different practices. The point of departure for this line of thought was two-fold. Firstly, speaking from a Danish perspective, the hitherto prevailing application of partnering had been generally instrumental in that partnering was argued to bring about certain effects that more or less could be predicted *ex ante* (EBST, 2005b) – an understanding neglecting important factors in the shaping of a partnering practice e.g. the dynamic socialisation between project participants and the complex interplay of institutional, organisational, and individual negotiations and practices as e.g. Black *et al.* (2000), Bresnen and Marshall (2000; 2001) and Koch *et al.* (2005) argues.

Secondly, contemporary events related to the building of a new headquarters for the Danish Broadcasting Corporation (completed as a partnering project) as well as a critical study of a less successful partnering project, which I completed (Gottlieb *et al.*, 2004) gave rise to a rather heated public debate concerning the advantages and disadvantages of partnering and not least the circumstances under which partnering could be seen as a value-adding enabler of improved ways of working. I still remember two episodes in particular, which sparked my interest further. The first was being called to a friendly talk at a larger contracting company – not so much about what to write in an official report (guess the harm was done), but about informing one's partners of it prior to publication, so they could prepare a counter-reply. The second was being invited to present the results from my study for an audience of stakeholders in the promotion of partnering. After delivering the presentation, a discussion arose concerning the conclusions drawn; as it was questioned whether the project studied indeed was a partnering project or not – as it was stated: although the project initially was labelled a partnering project, it did not quite fit this label anymore. The report sparked quite a lot attention in the media and was associated with headings and statements such as: *'Partnering gets tarnished'*, *'Danish partnering is at a beginner's level'* and *'Mixed experiences with partnering.'* Incidentally, the report was soon followed by studies documenting the benefits of partnering.

Figure 1. Media attention surrounding the release of a critical report on partnering

The reason for the reception and attention the report was met with was probably due to the fact that partnering previously had been promoted through success stories and had been met with little public critique. Green (1998, 1999a, 1999b) and Green and May (2003) in a series of overtly critical debate papers on BPR, Lean and partnering (here treated under the label of management concepts) provide a possible explanation to what seems to be an apparent sensitivity to criticism displayed above. Green thus claims that rhetoric, the dominant management discourse defines the reality of management practice, and that there is a discrepancy between this rhetoric and the reality; that supposedly neutral or positive rhetoric on e.g. partnering in reality: "…*too often serves only to disguise the crude exercise of buying power*" rather than satisfying the promises of better collaboration, trust or continuous development (Green, 1999a: 177). Green (1998: 384-385) further urges academia to challenge the dogma of positivism, which so often dominates and be aware of the constraints within which researchers operate, which build on the assumption of 'objective facts', 'absolutism' and 'universalism.' Rather we should be sensitive to subjects such as 'politicking', 'discourse' and 'power'. On a similar note Bresnen and Marshall (2000) suggest that the study of partnering might benefit significantly from drawing more on frameworks from mainstream organisational theory, placing emphasis on contingency and context, exploring interrelationships between formal and informal aspects.

The reason for Bresnen, Marshall and Green to highlight these particular issues is that most research on partnering as well as on construction research in general is quite biased towards the aforementioned dogma of positivism, often drawing on quantitative methods and attempting to *centre* the understanding of the phenomenon in hand. As Bresnen (2007: 365) argues is the case with partnering:

> *"…emphasis is put on the search for general principles and universally applicable tools and techniques that can be used to support partnering. While this may be a highly desirable aim, the effect of this more prescriptive approach is to promote a model of partnering that is stylised and abstracted from any immediate practical context in which it might be applied."*

And further:

> *"Rarely is partnering systematically examined in sufficient depth (or from different points of view) to present a fully rounded and convincing picture of its practical benefits and limitations." (Bresnen, 2007: 366).*

Arguing that the research in the construction management tradition is very limited in the extent to which it explores e.g. social aspects of partnering drawing on research and theory in the social sciences, especially with regards to the effects of power, Bresnen suggests that there is much to be gained from a more critical account of partnering:

> *"…not only through any contribution that it might make to discourses of change within the sector, but also through what a critical examination of partnering in construction might have to say about the governance and conduct of inter-organisational relations in project environments more generally." (Bresnen, 2007: 366; emphasis added).*

This present study constitutes an attempt to contribute to those very factors identified above in trying to provide a more nuanced or 'open-minded' understanding of the possible effects produced by partnering in a specific social setting, rather than impose *ex ante* limits for possible effects, which are a result of more formalistic methods and theories. In the following discussion of the theses and research question framing my study, I will briefly discuss the basic theoretical and analytical implications hereof.

Theses and research questions

The above brief discussion brings me to the following points, which constitute if not methodological imperatives then at least cautionary prescriptions or hypotheses in the study of partnering.

Using Andersen (2003: XI-XV) as inspiration, the first and most prominent point pertains to the seemingly contingent, shifting and slippery nature or appearance of the concept of partnering as I have experienced it. No doubt, partnering means something – it has some quality to it; however the relevant question is whether we then should deduce that partnering also has a universal absolute, essentialist quality to it, implying that partnering can be defined and not least functions with some degree of instrumental rationality that can be made subject to optimisation or improvements.

Claim: We should not ask what it means that something exists. It is absurd to presuppose the existence of an 'essentialist object' and to look for any explanation of what it is and how it works.

I therefore suggest that questions of trying to create unity and essence, and positioning the object or phenomenon as the meaning horizon of the study should be abandoned:

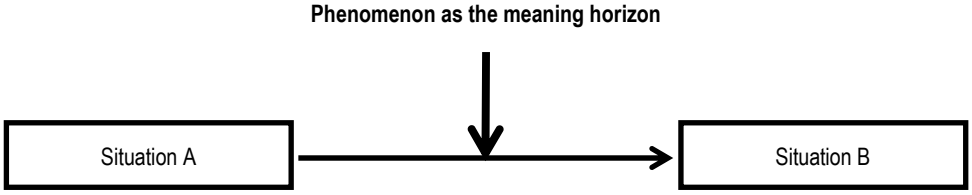


Figure 2. Ontologising the phenomenon of study

Claim: We should concern ourselves with observing how 'the world' comes into being if we are to avoid ontological reductionism and instead be able to appreciate the empirical multiplicity we are facing.

Thus, having no interest in improving instrumental rationality, and seeking to refrain from falling into ontological reductionism, I suggest that it may be more fruitful to study the process of 'coming-into-being' of partnering as well as specific instances or events in the enactment of partnering if we are to appreciate the seemingly fragmented, discontinuous, unstable and polyvalent appearance of the phenomenon we are facing:

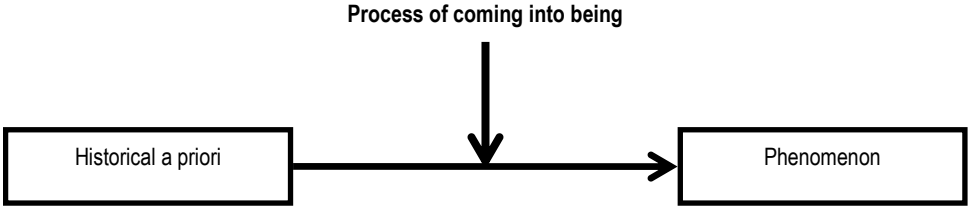


Figure 3. Studying the coming-into-being of phenomena

Thus, making the process of coming-into-being or constitution the central concern lets us avoid falling into the reductionist trap that characterise much construction management research and ignores the apparent discrepancy between a theoretically constructed 'centred concept' and the empirically experienced 'shifting concept.' The study of the process of coming-into-being, however, also situate 'social order' as a central analytical theme as we neither can presuppose the existence of, nor concern ourselves with, deviations from an order predicated by the concept (Clegg *et al.*, 2002). These concerns lead to the following basic problematisation:

How can we understand partnering and the order it produces, if we are to embrace the thoroughly polyvalent qualities of the concept?

In order to answer this problem, I turn to Foucault's dispositive analysis, as it in my eyes provides a highly appropriate analytical strategy for dealing with this problem, as the heterogeneous character of the dispositive, as seen below, makes it possible to work with an empty ontology.

Qu'est-ce qu'un dispositif?

According to Foucault (1977: 194) a *dispositif* or dispositive is:

> *"…a thoroughly heterogeneous ensemble consisting of discourses, institutions, architectural forms, regulatory decisions, laws, administrative measures, scientific statements, philosophical, moral and philanthropic propositions – in short, the said as much as the unsaid."*

Jensen (2007) argues that we should understand a dispositive as a theoretical re-construction; a pattern for organisation; a distinct way of doing things. It is not an *objet réel* but an *objet théorique*, by which is implied an object enabling us to see that the world is organised in ways which are neither visible nor hidden (Jensen, 2005). The dispositive is a pattern or modality for organisation, yet constituted by organisational practices itself. The dispositive is thus at the same time constitutive for practice as well as constituted by practice.

The work I propose can be described as a dialectic investigation of problematisations; dialectic in a methodological sense that is, striving towards an active creation of understandings of *dispositives* within the building sector through a mutual inoculation of synchronic and diachronic problematisations of the field of investigation.

The dispositive analysis thus considers both the role of historical imprints on present practices, or rather that present practices or events cannot be understood outside their historical context, as well as attempts to 'freeze time' and map current practices and events in their positivity. As a form of structuralism, the dispositional analysis is concerned with regularities in a social field; as a form of historiography, the dispositional analysis stands in the 'service of life' by problematising present forms of practice and knowledge in the light of past practices and knowledge. In Villadsen's words (2004: 2):

> *"…it concentrates on historical moments when strategies of government are being questioned and transformed. Pointing out a specific break in history is an analytical tool by which the genealogist constructs a discontinuity in his story."*

The *raison d'être* of this line of thought is that in order to understand the choices we face today we must clarify the choices made in the past – and not least the specific dispositives, which made these choices possible, plausible, necessary or exclusive in the first place. This form of historiography might not be able to "…*explode the myth of technological determinism and make it possible to imagine alternatives to the existing paradigm of industrialism*" and shape our future by changing our ideas "…*not just of how history happens, but of our own past*" as Brody (1985: 613) argues that the kind of historical study Piore and Sabel conduct in their analysis of the so-called second industrial divide can accomplish. Rather, genealogical historiography is the active creation of historical events with the objective of questioning current taken-for-grantednesses by referring them back to the conditions of hegemony and power under which they are established. With the dispositional analysis a further layer is added to the analysis – the attempt to explain how certain dispositives cut through the social as a function yielding off certain distinct forms of governance and organisation, which create, structure or delimit sample *spaces* of possible strategies, technologies and subjectivities, which make up a more or less coherent field of practice and action.

Research questions

Thus, in order to answer the above problem, I pursue the following questions:

1. Under which conditions has partnering come into being?
    a. What are the historical conditions that have made the emergence of partnering possible?
2. In which form has partnering come into being?
    a. What are the reasons for the linking together of some components as functional elements in partnering, whilst others are excluded?
3. How is partnering actualised in social events?
    a. What does partnering produce? Which processes of order is problematised and made possible by partnering, and how is this order handled in a specific social event?

Dissertation structure

Below I will account for the structure of the dissertation, using the above research questions as structural devices.

Part I

The remaining first part of the dissertation is concerned with providing the methodological basis for the study of partnering as a *dispositive*. I start with some observations on post-structuralism and discourse analysis in order to position the overall approach of the study within a general philosophy of science frame, highlighting the most basic implication of this approach *vis-à-vis* the more traditional engineering science approach, which e.g. Green, Bresnen and Marshall challenges as the basis for studying of partnering. Then, I will take the long way over Foucault's *The Archaeology of Knowledge* in order to account for the methodological implications of the approach. Then the 'genealogical contribution' will be discussed, as it also plays an integral part in the dispositive analysis, before my attention to the topic of the dispositive and not least questions of power and modalities. Part I will then conclude by discussing how I have worked with archival research methods, interviews and the case-study in a post-structuralist or *Foucauldian* perspective.

Part II

The second part of the dissertation is concerned with the first two research questions. First, I examine the historical conditions leading to the formation of partnering. This will be accomplished in the form of a dispositive analysis in which the gaze is opened widely and partnering will be discussed from a perspective of historical transformation. This analysis will show how different dispositives of building practice have been formed historically by different strategic logics. I will discuss what I call the dispositives of *building customs and practices*, *rationalisation* and *negotiation*. Secondly, I will propose a conceptualisation of partnering as formed by a *strategic logic of exemptions* allowing us to stabilise the concept in all its ambiguity by actively constructing a theoretical pattern of order capable of handling the empirical plurality we face and explain the criteria for the linking together of functional elements constituting partnering.

Part III

Building on the conceptualisation of partnering provided in the previous part of the dissertation, focus is next shifted to the question of the actualisation of partnering,

i.e. which processes of order partnering establishes and how this order then is handled in a specific social event. Especially important in this respect is the notions of space and order, which will be used to discuss how the logics of exemptions opened by the dispositive of negotiation, in the form of partnering, permeate the social and displace/challenge traditional almost taken-for-granted practices and routines. Focus is here shifted from a critical historiography to an ethnographic investigation in order to examine and discuss how partnering at one and the same time predisposes different kinds of behaviour and rooms for manoeuvre as well as is translated and negotiated into local stabilisations and understandings of the concept.

Part IV

The fourth part of the dissertation is devoted to the conclusions of the study. Here, it is argued that partnering can be understood as a dispositive that establishes a space for interventions within which local actions are conducted in order to (re-) establish a social order. This takes place in the efforts to handle the tensions between a traditional stratified sociality, with its commonsense qualities, and a 'smooth' sociality in which circulation, self-governance, individual responsibility and ownership become more important than unambiguity, planning and control.

On bias

According to Jensen (2005a) using the dispositive analysis entails that the social is sorted or arranged from a perspective of governance frames (*governmentalities*) instead of from traditional disciplines such as medicine, law, economy, etc. This is also my approach – to understand partnering from this perspective. This being said, I have however throughout the dissertation chosen to work with and from a strong regulatory focus in discussing partnering – a focus which might seem somewhat biased; however there are several interrelated reasons as to why I have chosen to focus especially on official or governmentally endorsed problematisations or *politisations* of the construction sector.

First of all, I agree with Murray and Langford (2003) in their discussion of the UK construction industry, that the influence of the government in the remodelling of the construction industry cannot be neglected. Also in Denmark, the industry has for many years been challenged to deliver better performance, faster construction and defect free buildings – a challenge often proposed by the government.

Secondly, it comes down to the actual choice I have made of pursuing my interest in how the state at one and the same time structures a possible field of action for

the institutions and companies of the sector whilst actively using certain public discourses as a frame of reference or source of legitimacy for their own legislation. In my pervious work at the Danish Building Research Institute I have had the opportunity to engage in several commissioned projects for the Danish construction authorities on the topic of partnering and other new forms of collaboration. A common denominator in much of this work has been the discussion of how the Danish industry could learn and benefit from foreign knowledge and in this respect another common denominator was that often various legislative conditions of the Danish sector emerged as problematic in relation to the possible capitalising of the new approaches. Furthermore, as much existing research in the field of construction management has chosen a very micro-sociological approach to the study of practice and forms of organisation in the Danish construction sector – focusing more explicitly on the governmental sphere, this dissertation will hopefully bring new insights into play. However, I do attempt to make up for this bias through a case-study in which I discuss the actual patterns of socialisation in partnering on a specific building project. Furthermore, by using the dispositive as the analytical point of entry I have hopefully been able to downplay the role of the state as *the sole initiator* of change. Rather, agency is displaced to the level of the dispositive.

1.3 Methodological considerations

This chapter could have been written in numerous ways. In my eyes there is no right way, and no wrong way – there is however according to scientific conventions certain criteria, which generally are seen as more appropriate than others. These criteria however vary from scientific discipline to scientific discipline, or with a *Foucauldian* rephrasing from one *connaissance* to another.

The reasons for devoting an entire chapter to this task are two-fold. The first and undoubtedly most trivial reason is that I am expected to do so. It is one of those idiosyncrasies of the PhD-study regardless of scientific orientation or embedding. The student is to demonstrate his or her scientific adeptness by building a valid/coherent case for the results he or se or she claims, as it is against this background it is evaluated. As simple as that! The second reason is that I got sucked into this discussion by sheer interest. Metaphorically speaking, I fell in love with Foucault's thinking, and a few select, primarily Danish, researchers' interpretations hereof. One thing however continued to puzzle me and that was how to actually

accomplish or carry out a *Foucauldian* study, i.e. what are the basic implications hereof? Whether I accomplish this or not, I will leave to the reader to judge.

From engineering science to discourse analysis

Speaking very broadly from a philosophy of science perspective methodology can be seen as one aspect of the trinity constituting the concept of 'science'; the others being those of ontology and epistemology. This working definition of methodology is somewhat congruent with that of Silverman's (2001: 4) suggestion that a methodology refers to how we will go about studying any phenomenon with respect to the choices we make about cases to study, methods of data gathering, forms of analysis etc.

Ontology in this context deals with the domain of a scientific approach and the perception of this domain; or put more bluntly the perception of reality. Relevant questions, bordering two extremes, in this respect are e.g.:

– Is reality 'outside' the subject or a product of individual consciousness?
– Is reality objective or subjective?

Epistemology on the other hand is concerned with perceptions (or assumptions) of the background for knowledge and knowing, that is how do we account for what we know. Relevant questions in regard to epistemology are:

– How can we obtain knowledge about reality?
– Does knowledge have to be 'lived' or based on personal experience?

Methodology refers to both of these concepts in that it can be seen as a collection of theoretical elements in a scientific approach or in other words: ontology, epistemology, methods and research techniques as a more or less coherent whole.

In principle, the scientific field in which I am institutionally anchored, the field of engineering, concerns itself with planning and control of production, process and products. Traditionally speaking engineering is based on a fundamental positivist scientific understanding in the construction of problems and solutions. In very rough terms this involves a rather unproblematic perception of knowledge as being objective and stable existing independent of individual cognition. I will part with this understanding on several important areas, one of which is that I argue that the necessary precondition for (and result of) any research process is to continuously account for, explicitate, and demonstrate one's basic ontological and epistemological

assumptions, and that this process of 'explicitation'; of being reflexive; of making transparent the relationships between 'the original and the translations' (the field studied and the thesis written and conclusions drawn) is far more important than arguing for validity, reliability, representability, etc. as are the traditional features of the engineering field methodology.

In other words, being reflexive pays homage to Foucault's concept of *savoir* rather than *connaissance*. Where *connaissance* can be understood as:

> *"…the relation of the subject to the object and the formal rules that govern it […] savoir refers to the conditions that are necessary in a particular period for this or that type of object to be given to connaissance and for this or that enunciation to be formulated." (Foucault, 1972/2006: 16-17; original empahsis).*

As will be discussed in the next chapter, Foucault argues that it is understandable to distinguish between scientific domains and archaeological terrains, as science (knowledge as *connaissance*) is localised in a field of knowledge (as *savior*) and has a specific role to play herein, which varies according to different discursive formations. The name he gives to this role is ideology – a feature being immanent to *connaissance*. Being reflexive is thus a practice of being open to investigate one's own assumptions, or being able to catch some of the otherwise blind spots in the observations made by the scientific apparatus applied. In this sense it also becomes clear that choice of methodology is not just about finding a set of 'valid' techniques and methods; rather it involves a series of fundamental questions on the nature of knowledge as well as of the research domain.

The first step of the research process is often concerned with generating a research problem. On this topic Silverman (2001: 5) writes that beginning researchers often tend to make a basic error in that they fail to distinguish sufficiently between research problems and problems that are discussed in the world around us; the so-called 'social problems' that are at the heart of e.g. political debates.

Focusing on what at first seems to be a dichotomy between research problems and social problems Silverman (2001: 6) argues that we must look at the terms being used to define a problem prior to elevating a social problem to a research problem. Silverman continues that a theoretical anchorage or guiding frame plays an important part in the design of a researchable problem. The essence of this discussion is boiled down in what Silverman (2001: 7) calls the absolutist trap; in

uncritically accepting the conventional wisdoms of our day. In two of these, *tourism* and *romanticism*, which are 'targeted' qualitative researchers, Silverman can be seen as proponent of a theory driven approach in which he advocates a need for a theoretically grounded pre-understanding of e.g. structures and cultures guiding the research in question in order to avoid producing trivial or common-sense knowledge. To generate a researchable problem, and thus take the first step towards producing socially relevant research, Silverman suggests that one should consider the concept of sensitivity. Sensitivity to historical, political and contextual issues thus holds the key for social science research to "…*offer participants new perspectives on their problems*" (*Ibid,* 2001: 9) and if we fail to be sensitive to any of these issues "…*we run the risk of lapsing into a 'social problem' based way of defining our research topics."* (*Ibid*, 2001: 11).

Without going into too many details, I will give a short summary of the three types of sensitivity:

- *Historical sensitivity* entails sensitivity to the relevant historical evidence when setting up a research topic. It can help us understand how we are governed.
- *Political sensitivity*, can be used as a means of grasping the politics behind defining topics in particular ways and detecting vested interests behind certain ways of formulating problems, which otherwise have acquired an almost taken for granted status.
- *Contextual sensitivity*, being the reflection over meaning-making in different contexts, questioning terms, notions and concepts and the implications of these dependent of the actual setting or arena in which the 'social play' unfolds.

To this list a fourth, albeit somewhat different, type of sensitivity can be added; *linguistic sensitivity* (Alvesson and Skjöldberg 2001: 200). Where Silverman's types of sensitivity are facets of ontological concern the notion of linguistic sensitivity can be seen as an epistemological concern. Stressing the role of language, as "…*the medium in which we conduct our social lives and create our symbolic existence*" (*Ibid*, 2001: 200) Alvesson and Skjöldberg beseech us to pay closer attention to the meaning and character of language. Language and language use can thus become the object of the study, which is the case in the poststructuralist dispositive analysis, I have chosen as a basis for the methodological framework I apply.

Post-modernism and the linguistic turn

In my work, I have chosen to inscribe myself in a fundamental post-modernistic, more precisely post-structuralistic approach, which views the social and physical world as constructed by human cognition; that knowledge, truth and identity is created in social relationships between individuals and thus is woven into the culture and into the linguistic understandings we as individuals have at our disposal and utilise (Jørgensen and Phillips, 1999). Reality is in other words discursively constructed, and a central element in any research is thus to make opaque that which is created through language, and how it is created (Fairclough, 2003). A similar, albeit *luhmanian*, approach is taken up by Niels Åkerstrøm Andersen (2006) in his recent book on the topic of 'partnershipping': In here he sets out to examine the notion of partnerships as a way of making agreements in a hyper-complex society, in which the conditions of agreement are ever changing. Andersen sees a partnership as a contract on development of contracts, as a promise of entering into future promises, as a vehicle of possibilities constantly exploring productive linkages between differing logics and perspectives; and as such they are fragile responses to the increasing differentiation and demand for adaptability, which permeates our society. Partnerships, being characterised as one of the buzzwords of contemporary society, possess a subtle feature in that they in Andersen's analysis, emerge as a multifaceted phenomenon contradicting the logic of modern conceptions of governance and organising. In doing so, Andersen dissociates himself from seeing social structures and processes as determinants of society and culture, and instead recognises the importance of language and discourse in the constitution of societies.

The idea of language as a structuring agent of reality is however not a new one, as it is the central element of the *linguistic turn*, a major development in the Western philosophy during the twentieth century. In essence proponents of the linguistic turn argue that all that can be known about reality is conditioned by language. According to Roy (1998) the linguistic turn can be characterised by saying that it turned every philosophical, psychological and not least epistemological problem into a problem of language, or at least a problem dependent on problems about language:

> *"Accordingly, in the perspective opened by the Linguistic Turn, language is made the unique or at least the most central and fundamental object of philosophical investigation."* (Roy, *1998: 1).*

Alvesson and Skjöldberg (2001: 200) write that language has occupied a central position in philosophy throughout the twentieth century, and the idea of language as a structuring agent or reality is thus not a new one. However with the *linguistic turn* in the social sciences interest in language have moved away from linguistic units to larger textual units or discourses (*cf.* Alvesson, 2002).

Discourse analysis is a research orientation developed out of a criticism of traditional views on language in research. One of the basic epistemological pillars of discourse analysis is the argument that:

> *"The way language is used does not so much reflect a person's inner, subjective world, as generate a version of this world that is in part a transient one." (Alvesson and Skjöldberg, 2001: 200).*

As such, discourse analysis reveals a similarity with post-structuralism in that people are assumed to be inconsistent and that language is not seen as reflecting some external or internal conditions. Disregarding the underlying reality as the object of the study discourse analytical research instead emphasises variations in language use and ask:

> *"On what occasions are the different attitudes [of individuals] expressed? How are utterances constructed? In what contexts are they included and what functions do they fulfil?" (Ibid, 2001: 205).*

Discourse analysis is oriented towards examining how meaning is constructed within specific contexts or relations, what discourse theory would call relational discursive systems, discursive formations or orders of discourse, which continuously are created and transformed through language use.

Over the last 30 years the terms *discourse*, *discourses* and *discursive* as a modifier have increasingly been appearing everywhere throughout both the social sciences and humanities. Sawyer (2002) suggests that the term discourse has become an intellectual trend as it has expanded both in scope and propagation across different disciplines. This is seen as an indication that it actually satisfies an intellectual need. The problem, however; is that there is no agreed-upon definition of what a 'discourse' is, leading to some confusion:

> *"It is often difficult to make sense of what people mean by discourse. In many texts, there are no definitions or discussions of what discourse means. Authors treat the term as if the word*

> *has a clear, broadly agreed upon meaning. This is simply not the case." (Alvesson and Kärreman, 2000: 1126).*

Thus, the first task in hand is to come to terms with what is meant by discourse in this dissertation. This is however by no means an easy task as it is used rather differently in different subject areas or scientific disciplines. As Abu-Lughod and Lutz note (in Sawyer, 2002: 434):

> *"'Discourse' has become, in recent years, one of the most popular and least defined terms in the vocabulary of Anglo-American academics – As everyone readily admits, defining discourse precisely is impossible because of the variety of ways it is used."*

Sawyer then continues that the reason for their troubles is that they are not referring to the relatively unproblematic *standard usage* of the term that originated in the 1940's semantics tradition. In semantics, being a scientific subfield of linguistics (the study of human language), discourses are linguistic units composed of several sentences i.e. conversations, arguments or speeches. The analysis of these linguistic sentences is called discourse analysis. Sawyer (*Ibid.*, 434) instead points to the fact, that Abu-Lughod and Lutz rather is commenting on a broad usage of term, which represents the most widespread 'understanding' in the social sciences. The reason for putting understanding in the unflattering inverted commas is that it often is difficult to identify the conceptual content of the specific use of the term discourse. In the broad usage, typically linked to the work of Foucault, discourse refers to both any linguistic mediated practice as well as an institutionalised way of thinking (Hansen *et al.*, 2001). However, as Sawyer argues authors attributing their broad usage of the term discourse to Foucault often do so in a casual manner lacking page numbers, quoted passages or even references to specific works of Foucault, hereby implying that the use of a *Foucauldian* approach is as unproblematic as the use of the term discourse leading to a misreading of the historical and intellectual content of some of his works (*Ibid.,* 2002: 434). My own reading of a part of Foucault's work, especially his *Archaeology of Knowledge* (1972/2006), as well as numerous *Foucauldian* studies have lead me to echo this statement. I will however save this discussion for later on in this chapter and instead turn my attention back to the initial task of encircling the term 'discourse' and how it is used in different disciplines and theoretical perspectives. The aim of this further exercise is to build an understanding of how discourse can be used as a concept to understand partnering as a social and political phenomenon.

On discourse analysis

The interest in discourse theory and analysis is in direct contrast to the incomplete nature of the theory, in that there does not exist any stable paradigmatic understanding. Rather discourse analysis is an open and tentative theory being fundamentally anti-essentialistic implying an absence of any rationalistic or deterministic absolutism whether it is moral, economic or political (Hansen *et al.*, 2001: 1). In discourse theory:

> *"…changes in the world lead to the formation of new concepts and terms, and that change in the human vocabulary lead to news ways of organising the social life." (Own translation of Hansen et al., 2001: 2).*

Discourse analysis thus tries to examine how meaning is constructed within specific contexts or relations, what discourse theory would call relational discursive systems, discursive formations or orders of discourse, which continuously are created and transformed through political struggles. As the world, as mentioned previously, has no structural grounded meaning and meaning elements at the same time cannot be traced back to a single human subject's own interpretation of the world, there is no ontological privileged basis for understanding opinion formation and meaning-making. Meaning is constructed in historically specific contexts of mutually constitutive *meaning elements*; meaning is a *radical construction*. The assumption in discourse theory is that societal structures and identities are shaped by discourses, which hereby become the pivotal points for the setting of meaning. Discourse theory further holds that we, humans, as interpretative subjects only can come to terms with the world through discursively constructed meaning making (*Ibid.*, 2001: 3).

According to Jørgensen and Phillips (1999), the understanding of language as a system not being determined by the reality it refers to, has its roots in the structuralistic linguistic tradition, which evolved based on the ideas of Ferdinand de Saussure who suggested that the relationship between language and reality, or more precisely between sign and referent (*le signe et le référent)* is arbitrary, and that we construct meaning through social conventions in which specific entities are connected to specific signs. However, as Saussure also suggested, the meaning of specific signs only comes from their relations to other signs from which they differ. Words are thus located in a network or structure of other words from which they

differ, and it is in the differences, on account of all that it isn't, that a word is assigned its meaning (*Ibid.*, 1999: 18).

Although contemporary discourse theory pays homage to the ideas of Saussure in specificity and structuralism in general, it does so with several modifications most important of which is the abandonment of the idea of the language as a total and unchangeable structure (*Ibid.*, 1999*:* 19). Signs still receive meaning relative to other signs, but what they differ from may change according to the situation in which they are used. Structures thus exist, however only in a temporary and sometimes contradictory fashion. Jørgensen and Philips further argue that this 'soft structuralism' solves one of the central problems in structuralist traditions – the problem of change and of how social, societal structures are created, reproduced and changed through specific language use. Hansen *et al.* (2001) argue that although different forms of discourse theory employ different terms and argument they all, more or less, cohere to five main arguments.

The first is that thoughts, statements and actions do not only exist *per se* but have to be understood in relation to specific discourses, which constitute their condition of possibility. Discourses are complex systems of difference, where meaning is constituted through its relation with other meanings. The absence of a determinant or fixed centre in the discourse enables a recurrent interplay between the different meaning elements of the discourse.

Secondly, discourses are the product of construction processes, in which meaning elements are either weaved together or torn apart. Such processes are sometimes referred to as politics, hegemonic articulation or enunciation.

The third argument concerns the delimitation of the discursive system, which is a problematic subject. Adopting Laclau and Mouffe's (1985) understanding of discourse theory, Hansen *et al.* (2001) argue that a discourse establishes its boundaries and receives its relative unity in relation to a threatening otherness, which is excluded from the discourse in question, but at the same time is present in the discourse as a destabilising factor, which hinders the closure of the system of meaning elements.

The fourth argument raises the question of what makes discursive systems collapse. Hansen *et al.* (2001) describe discourses as being elastic, thus implying that they can be stretched to enclose and give meaning to a series of new events. However, as discourses are a result of historically specific contexts of mutually constitutive meaning elements, discourse theory presumes that discourses to greater

or lesser extent are vulnerable dependent on the delimitations of what a discourse can contain. If and when a discourse cannot integrate, contain and give meaning to new events it will lead to a questioning of the discourse, thus endangering its existence.

Finally, the last common argument across the various discourse theoretical traditions deals with the question of subjectivity. Hansen *et al.* (2001) argues that this probably is one of the issues, which gives rise to the greatest disagreements between different theorists. A shared understanding is however that subjectivity cannot be understood outside specific historical and structural contexts; a notion giving rise to the discussion of subject positions, which will be discussed in more detail later on in this chapter. No matter these common characteristic arguments, Hansen *et al.* (2001) note that discourse theory is a rather distant theory, as it is an analytical approach rather than a full-fledged theory, in which concepts are joined in systematic typologies characterized by logical coherence and consistency and are operationalised with a view to empirical studies.

Varieties of discourse theory and analysis

Generally speaking discourse theory is interested in the processes that create, stabilise and change the discursive context of our speech, thoughts and actions. The argument for this is that the context is contingent and under continuous change as different 'forces' repeatedly try to renegotiate and reinterpret the discursive field. Whether is it antagonistic conflicts or attempts to stabilise a given field, this can be seen as a question of politics, involving the use of power. Discourses are thus constructed through confrontations between different strategies (or interests), which all operates in an ambiguous and dilemma ridden terrain, unable to determinate its own reproduction, thus making every decision a political decision (Hansen *et al.*, 2001: 3). There are however quite a few varieties of discourse theory and analysis which differs from one another in a number of ways. How these perspectives differ can be discussed in a variety of different ways. I turn to Alvesson and Kärreman (2000) who make use of a couple of continua in their representation of differences between the various perspectives – or as they put it themselves: in their attempt to clarify the various meanings of discourse in social studies. One of the distinctions they make is between 'discourse' and 'Discourse' (with a capital D). They reserve the term 'discourse' to the study of social text, i.e. talk and written text in its social action context, whereas 'Discourse' is used for the study of social reality as

discursively constructed and maintained, i.e. the shaping of social reality through language. Discourse with a capital 'D' is thus viewed as "…*the stuff beyond the text functioning as a powerful ordering force*" (Alvesson and Kärreman, 2000: 1127). In their discussion of the varieties of discourse theory Alvesson and Kärreman's consider the following aspects:

– The connection between discourse and meaning.
– The formative range of discourse.

On the topic of the connection between discourse and meaning the main question is whether discourse (in the plural sense) precede and incorporate cultural meaning and subjectivity or, if on the other hand, 'only' is referring to text and talk loosely coupled to the level of meaning (Alvesson and Kärreman, 2000: 1129). Stating that no language use is devoid of meaning, Alvesson and Kärreman nevertheless install an analytical dichotomy in the discourse/meaning relationship and distinguish between what they label *transient meaning*, emerging from specific interaction, and *durable meaning*, which in their words exists beyond specific linguistic interaction in a more or less stable manner. In this latter perspective meaning encompasses phenomena such as cultural and individual ideas, orientations, ways of sense-making, and cognition. On the continuum between these two outer poles, the two authors distinguish between various degrees of interconnectivity between discourse and meaning. These are presented as:

> *"…a spectrum of opportunities or research positions in the relationship between discourse in the sense of language and language use and meaning 'existing' beyond – although hardly independent of – the temporal and specific use of language" (Alvesson and Kärreman, 2000: 1130).*

In a close coupling between discourse/meaning, what the authors refer to as discourse/meaning collapsed, discourse is seen as driving our subjectivity; it is the structuring principle of society determining meaning and subjectivity. This muscular understanding of discourse is often attributed to the Foucauldian take on discourse analysis and has often been criticised as it leaves little or no room for subjects to move within discourses. This is especially the case when dealing analytically with discourses in a macro-systemic perspective – that is when viewing discourse as 'Discourse', being what Alvesson and Kärreman (2000) refers to as questions of the formative range of discourse concentrating on the contextual character of discourse.

This second dimension of Alvesson and Kärreman is delineated into four basic levels; micro-discourse, meso-discourse, Grand-Discourse and Mega-Discourse. The main issue in this respect is whether discourse should be understood as a local, contingent phenomenon, which calls for detailed studies in specific social settings resulting in findings of limited universal (or rather highly context dependent) explanatory power or if discourse, on the other hand, entails an interest in understanding the broader ways of the structuring of our social world. This distinction is for various reasons often described and applied as an 'either-or' design choice in specific studies. One of the primary reasons according to Alvesson and Kärreman (2000: 1134) is that there is a tension between the two levels. In micro-studies discourse is often viewed as an emergent and locally constructed phenomenon, whereas the macro-study usually starts from well established a-priori understandings of the phenomenon in question. Combined, the core two dimensions in Alvesson and Kärreman's model of discourse varieties results in the below matrix for the analysis of discourse in social science studies.

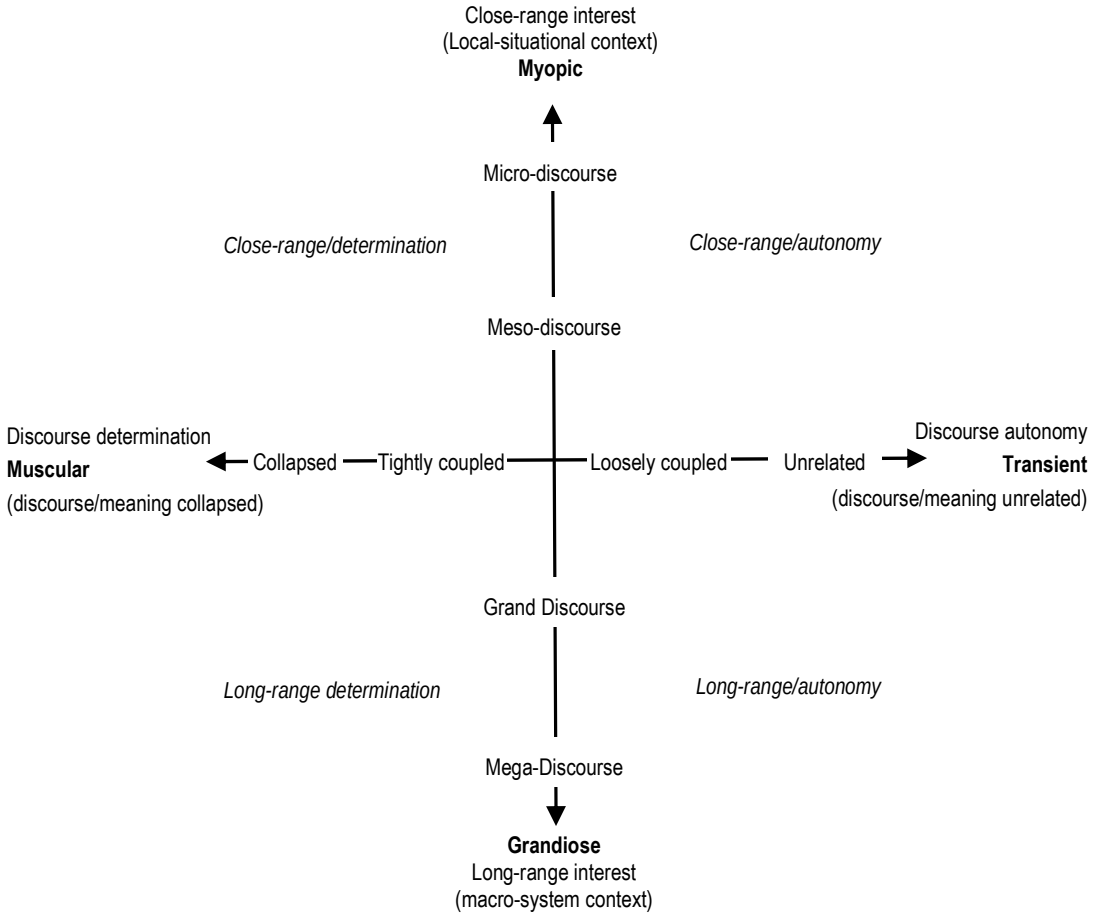


Figure 4. Core dimensions and positions in discourse studies (Alvesson and Kärreman, 2000: 1135).

As can be seen the authors operate with four archetypes of discourse studies. In a *close-range autonomous* study approach attention is directed towards the interrelationships between discourse (in the sense of language use) and the textual interaction (context) that produced the statement. In this perspective language use is viewed solely as textual phenomena in that what is of interest is what actual language use accomplishes in the given context, not whether language use reflects some *otherness*. In a *close-range deterministic* approach, discourse, on the other hand, is treated as it *can* reveal something about an exterior (non-discursive) condition; that it has a structuring effect either in respect to subjectivity or the framing of the social context. *Long-range autonomous* studies are interested in investigating to which extent statements or utterances display a standardised form of speech on a given subject matter across similar settings. Finally, from a *long-range deterministic* point of view the main emphasis is on investigating the rules that determine how we can articulate a particular phenomenon both in language use and as an experiential phenomenon. The basic assumption is that dominant and wide-spread discourse shapes both how to talk about subject matter and the meaning we develop about it; discourse is primary to subjectivity and practice through its constituting powers (*Ibid.*, 2000).

In the next chapter I will discuss the *Foucauldian* framework I have chosen to adopt in my studies. Although this framework, as laid out tentatively above, is attributed an interest in the long-range deterministic sphere, Foucault actually takes his starting point in:

> *"…the heterogeneous and dispersed micro-physics of power, [exploring] specific forms of its exercise in different institutional sites [considering] how, if at all, these were linked to produce broader and more persistent societal configurations." (Jessop, 2007: 36).*

Thus, as Jessop argues:

> *"Foucault also began to emphasize that, whilst starting at the bottom with the micro-diversity of power relations across a multiplicity of dispersed sites, two further interrelated issues required attention: first, how do diverse power relations come to be colonized and articulated into more general mechanisms that sustain more encompassing forms of domination and, second, how are they linked to specific forms and means of producing knowledge?" (Jessop, 2007: 36).*

As such, the *Foucauldian* framework allows us to dissolve the tension between ontologies of micro and macro, and 'climb the ladder of discourse' (Alvesson and Kärreman, 2000: 1139).

2. Theorising the dispositive

Generally speaking, Foucault's interests can be divided into three distinct, yet interrelated areas concerning the topic of knowledge: a) that knowledge is created simultaneously with objects and subjects in discourse; b) that knowledge and power is intimately connected; and c) that knowledge has a thoroughly historical character (Stormhøj, 2006: 55). I will discuss these areas below in trying to establish the foundations of Foucault's strategy of analysis, as I have chosen to apply it in this dissertation. Michel Foucault, born in 1926 in the town of Poitiers on the Clain River in west central France, is often described as one of the great intellectuals of the twentieth century and a part of the glittering generation of thinkers, which included Satre, de Beauvoir and Deleuze. In 1961 Foucault earned a doctorate in philosophy from the University of Clermont-Ferrand by submitting two theses including the well-known 'Madness and Civilization' (*Folie et déraison: Histoire de la folie à l'âge classique*). In 1970 he was elected to the College of France as the 'Professor of History of Systems of Thought', by which time he had already published several groundbreaking works such as 'The Birth of the Clinic: An Archaeology of Medical Perception' (*Naissance de la clinique - une archéologie du regard médical*), 'The Order of Things: An Archaeology of the Human Sciences' (*Les mots et les choses - une archéologie des sciences humaines*) and 'Archaeology of Knowledge' (*L'archéologie du savoir*). These works are often referred to as works of the early Foucault, in which the primary domain of analysis was on systems of knowledge most notably found and described in the 'Archaeology of Knowledge' (Foucault, 1972/2006), which represents a specific analytical approach to how discourse can be studied and understood in its relationship with power and knowledge. The later Foucault developed a further interest in modalities of power and subjectivity; themes addressed in his genealogical respectively ethical methodologies, according to e.g. Dean (1999). However, as we later will see, Foucault's authorship from the beginning to the end can be seen as one (dis-)continuous attempt to develop an analytical approach to the study of power and subjectivity – even in his so-called archaeological period.

2.1 Archaeology, structuralism and history of ideas

The archaeology of knowledge (*AK*) is generally accepted as Foucault's first attempt to describe theoretically the approach he used in his previous writings. Foucault himself describes the archaeology of knowledge as follows:

> *"At this time there emerges an enterprise of which my earlier books Histoire de la folie à l'âge classique (Madness and Civilization), Naissance de la cliniques, and Les Mots et choses (The order of things) were a very imperfect sketch. An enterprise by which one tries to measure the mutations that operate in general in the field of history; an enterprise in which the methods, limits, and themes proper to the history of ideas are questioned; an enterprise by which one tries to throw off the last anthropological constraints; an enterprise that wishes, in return, to reveal how these constraints could come about. These tasks were outlined in a rather disordered way, and their general articulation was never clearly defined. It was time that they were given greater coherence – or at least, that an attempt was made to do so. This book is the result." (Foucault, 1972/2006: 16).*

What kind of book is *AK* then, and how should it be seen within the field of discourse analysis? The first thing that should be noted is that according to Andersen (1999: 40) it could be seen as more of a post-rationalisation and systematisation of what Foucault had done previously than as a manifesto for future research. Andersen thus claims that Foucault himself never to the letter used his own archaeological strategy of analysis; and as such there are no reasons for others to read this work too literally[1]:

> *"It has never been seen as a description of a method with systematic repetition and copying in mind. Rather, it makes sense to read it as a catalogue of methodological issues emerging when one attempts to relate to discourse without jumping to structuralism or other forms of reductionism." (Andersen, 1999: 40).*

This might be good all the same, as reading (as well as utilising) Foucault is an extremely difficult task for several reasons. Andersen (1999) embodies, and acknowledges, in his presentation of Foucault's discourse analysis the one I have

[1] As it will be discussed later on in this chapter, *The Archaeology of Knowledge* in my eyes not only represents a 'summary' of Foucault's methodological approach in his previous writings; it is also representative of his future works in that he in many ways lays out his future research agenda and highlights several important theoretical as well as empirical phenomena, which is examined and unfolded further in his later works, e.g. those of power, ethics, and the dispositive as illustrated in *The Archaeology of Knowledge* by Foucault's musings on the topics of sexuality and politics (Foucault, 1972/2006: 212-215).

had the most difficulties with; something I would call the co-construction of Foucault and the study in hand. Let me illustrate with a quote from Andersen (1999: 28):

> *"…when you have been engaged in a certain work for a long time, you no longer have a distance to it. You invent your own Foucault, who perhaps has more to do with yourself than with Foucault."*

This has in my eyes several problematic consequences, as it is often next to impossible to maintain or indeed acquire an understanding of Foucault's ideas and intentions when reading other authors descriptions and analyses of Foucault's assumptions and approaches. This in turn leads to a recognition of the impossibilities of taking any shortcuts by reading Foucault in 'second-hand' and thus the necessity of acquiring one's information as straight from the horse's mouth as possible; from Foucault's own writings.

This however leads to the second problem I have encountered. Often more than defining concepts, terms, thoughts, and ideas as what they are, Foucault takes a *saussurian* approach defining these in terms of what they not are, or what they differ from, rather than as what they are. I can however find solace (if possible) in the fact, that I am not the only one challenged by this. Andersen (1999: 29) thus writes that where concepts at Laclau and Luhmann are bivalent, Foucault's concepts are all polyvalent; they are multifaceted, ambiguous, and almost stripped of any positive definitions. Andersen (1999: 29-30) argues that this is a result of Foucault's rather unsystematic authorship, which in his eyes has 'failed' to produce a coherent discourse theory. This however should be seen in conjunction with Foucault's own disinterest in or reluctance towards pioneering his work as a new academic discipline. Instead of seeing Foucault's archaeology as a theory, Andersen suggests that it should be understood as a series of analytical strategies and methodological considerations one ought to read when dealing with discourses.

Continuing from Foucault's own understanding of the archaeological enterprise; to measure the mutations that operate in general in the field of history, he makes a few clarifications on behalf of the method. The first of these clarifications is that the aim is not to transfer a structuralist method to the field of the history of knowledge. Instead he aims at uncovering principles and consequences of an *autochthonous* transformation taking place in the field of historical knowledge; that is transformations taking place independently of the individuals' train of thought;

transformations which seemingly have some external agency of source. Secondly, Foucault states that his aim furthermore is not to use the categories of cultural totalities in order to impose on history the forms of structural analysis.

Foucault's attempts to distance himself from structuralism are rather important as the theoretical architecture of his archaeology has clear structural elements (Sawyer, 2002: 440). Sawyer (2002), among other things, investigates structuralist elements in Foucault's archaeology and finds that there are several analogues to chomskian linguistics, not in the search for relationships between deep structures and surface structures, but in the search for the principles according to which the enunciation of signifying groups could appear. Moreover, where structuralists in the words of Peters (1998) searched for homogeneity in a discursive entity and sought to efface history through synchronic analyses of structures, Foucault's archaeology (and later even more so the genealogy) sought to bring about a renewed interest in a critical history through a re-emphasis on diachronic analyses, on mutation, transformation, and discontinuity of structures. Foucault thus refuses to ask what it is that constitutes the specificity of a particular thought; instead he asks what differences develop within it over time, thus historicising questions of ontology. Rather than belonging to the debate on structure, Foucault describes his book as an enterprise into a historical analysis freed from the anthropological theme, belonging to:

> *"…that field in which the questions of human being, consciousness, origin, and the subject emerge, intersect, mingle, and separate off." (Foucault, 1972/2006: 18).*

For Foucault (1972/2006: 154) the archaeological description is an abandonment of the traditional history of ideas, a systematic rejection of its postulates and procedures; it is an attempt to practice a quite different history of what men have said. However, in order to fully appreciate and comprehend this task, one has to understand the Foucauldian notion of history of ideas. Although admitting to the difficulties of characterising a discipline like the history of ideas, as it is an uncertain object with badly drawn frontiers, Foucault sets of his description in the two opposing roles it seems to possess; to recount the byways and margins of history, and to describe and interpret the boundaries of existing disciplines, the durable 'great themes' of historical thought, from the outside.

On the first topic, Foucault (1972/2006: 153) criticises the history of ideas for being concerned with "…*all insidious thought; that whole interplay of representations that flow anonymously between men."* He describes it as the discipline of fluctuating languages, of

shapeless works, and of unrelated themes; the analysis of opinions rather than knowledge and of types of mentality rather than on forms of thought. Rather than recounting the byways and margins of the history of science or the history of literature, history of ideas draws on the history of ill-based knowledge, i.e. knowledge that could never attain the form of 'scientificity' being the themes that are never crystallised in a rigorous and individual system. On this account it becomes problematic for Foucault that the history of ideas at the same time tries to cross the boundaries of existing disciplines, as it does so on the basis of knowledge that has served as an empirical, unreflective basis for subsequent formalisations. He further argues that history of ideas tries to rediscover the immediate experience that discourse transcribes and that it follows the genesis, which on the basis of received or acquired representations, gives rise to systems and oeuvres. On the other hand, it also, from one domain to another, describes the whole interplay of exchanges and intermediaries, showing how scientific knowledge is diffused and gives rise to philosophical concepts; shows how problems, notions and themes emigrate from the philosophical field where they were formulated to scientific and political discourses. In doing so, history of ideas:

> *"…tries to revive the most elaborate forms of discourse in the concrete landscape, in the midst of the growth and development that witnessed their birth. It becomes therefore the discipline of interferences, the description of concentric circles that surround works, underlie them, relate them to one another, and insert them into whatever they are not." (Foucault., 1972/2006: 154).*

But how does the archaeology approach then differ from the history of ideas? Foucault spends the latter part of his book describing this in detail. I will get back to this at a later point, and instead focus on the four principles of the archaeology as Foucault describes them (1972/2006: 155-156).

The first principle is that archaeology tries not to define the thoughts, representation, images, themes and preoccupations concealed or revealed in discourses, but the discourses themselves; discourses as sign obeying certain rules. Archaeology is not an interpretative discipline seeking another better-hidden discipline. In Foucault's words it refuses to be allegorical. Secondly, archaeology does not seek to rediscover the continuous transition that relates discourses to what precedes or follows them. On the contrary it tries to define discourses in their specificity. The aim is to show in what way the set of rules that the discourses put

into operation is irreducible to any other; how disparate discourses function by their own distinct sets of rules. As such Foucault describes archaeology as a differential analysis of the modalities of discourse. Thirdly, archaeology does not try to grasp the moment in which the *oeuvre* emerges on the anonymous horizon. It is not a psychology, sociology nor anthropology of creation. Archaeology defines types of rules for discursive practices that run through individual *oeuvres* and sometimes govern or dominate them entirely. Finally, archaeology does not try to restore what has been thought, wished, experienced or desired by men in the very moment at which they expressed it in discourse. It does not try to repeat what has been said by reaching in its very identity. Archaeology is a rewriting, a regulated transformation of what has already been written; it is the systematic description of a discourse-object.

Archaeology: The methodological premise

The archaeology of knowledge consists of three main parts each devoted to a discussion of specific central concepts and his approach in general. In Part II 'The Discursive Regularities' Foucault (1972/2006) defines and describes *the discursive formation*, which is a central analytical concept. The basis of Foucault's discussion in Part II revolves around four hypotheses of the valid unity forming group of statements. In Part III 'The Statement and the Archive' Foucault distances himself from the level of the discursive unity and focuses more carefully on a term, which he used frequently in the previous part, *the statement*. Using the statement as the pivotal point Foucault defines two additional key terms in his approach, *discourse* and *the archive*. Finally, in part VI Foucault describes the projects of archaeology and how it differs from the traditional history of ideas, upon which he looked with aversion.

Statement, archive, formation

Discontinuity, rupture, threshold, limit, series, and transformation are all concepts that present historical analysis with theoretical problems, and that it is these problems that are the focus of his archaeological project; the measuring of mutations operating in general in the field of history. Tradition, influence, development, evolution, and spirit are all notions, which must be abandoned if one, in the name of methodological rigour, is to address anything but a population of a dispersed event. Furthermore, Foucault calls for us to reject the familiar groupings and categories, such as science, literature and religion, and in particular the unities

that emerge in the most immediate way: those of the book and the oeuvre, the reason being that:

> *"The frontiers of a book are never clear-cut: beyond the title, the first lines, and the last full stop, beyond its internal configuration and its autonomous form, it is caught up in a system of references to other books, other texts, other sentences: it is a node within a network […] As soon as one questions that unity, it looses it self-evidence; it indicates itself, constructs itself, only on the basis of a complex field of discourse." (Foucault, 1972/2006: 25-26).*

Summarising, Foucault argues that all these pre-existing forms of continuity that are accepted without question must remain in suspense; that:

> *"…we must show that they do not come about of themselves, but are always the result of a construction the rules of which must be known, and the justifications of which must be scrutinized." (Foucault, 1972/2006: 28).*

If one thus is to examine the mutations operating in the field of history; to interrogate accepted continuities; to study the conditions that have brought life to specific concepts, notions, knowledge, disciplines or *discourses*, one has to construct a theory based on the field of the facts of discourse. The starting-point of this enterprise is in whatever unities are already given, exemplified by Foucault in psycho-pathology, medicine, or political science, however we are advised not to place ourselves within these unities to study their internal configurations or secret contradictions. Rather we should make use of these accepted unities for long enough to ask:

- What unities they form
- By what right they can claim a field that specifies them in time
- According to what laws they are formed
- Against the background of which discursive events they stand out, and
- Whether they are not, in their accepted and quasi-institutional individuality, ultimately just surface effects of more firmly grounded unities

In other word Foucault says he will accept the groupings that history suggests only to subject them to interrogation, and once the immediate form of continuity are suspended, an entire field is set free:

> *"A vast field, but one that can be defined nonetheless: this field is made up of the totality of all effective statements (whether spoken or written), in their dispersion as events and in the*

> *occurrence that is proper to them […] One is led therefore to the project of a pure description of discursive events as the horizon for the search for the unities that form within it." (Foucault, 1972/2006: 29-30. Original emphasis).*

Statements are in other words a central analytical theme for Foucault, and the question posed in the description of the events of discourse is thus how it is that one particular statement appeared rather than another. It follows from this that we in the analysis of the discursive field have to comprehend the statement in the specificity of occurrence and determine its conditions of existence, if we want to know which specific existence that emerges from what is said (Foucault, 1972/2006: 30-31).

Statement

The archaeological approach consists very broadly speaking of an analysis of *statements* in their positive appearance. Statements thus have to be analysed as they appear and not with reference to *a cogito*; neither individual nor to some kind of collective consciousness:

> *"This analysis presupposes that statements are considered in the remanence (rémanence) that is proper to them, and which is not that of an ever-realizable reference back to the past event of formulation." (Foucault, 1972/2006: 139. Original emphasis).*

In other words, the statement must never be reduced or elaborated to an expression of anything else than what it is e.g. to that of the intension of the statement, the context for the statement, or the meaning of the statement (Andersen, 1999: 44). But what is a statement then? Foucault goes to great distances in defining the concept through a lot of negative work before coming to terms with the intellectual content of the term. First of all he explains that the statement is not the same kind of unit as the sentence, the proposition, or the speech act; however at the same time it is not the same kind of unit as a material object with limits and independence (Foucault 1972/2006: 97). In a statement, Foucault writes, one should not seek:

> *"…a unit that is either long or short, strongly and weakly structured, but one that is caught up, like the others, in a logical, grammatical, locutory nexus. It is not so much one element among others, a division that can be located at a certain level of analysis, as a function that operates vertically in relation to the various units, and which enables one to say of a series of signs whether or not they are present in it" (Foucault, 1972/2006: 97).*

Rather, a statement should be seen as something indispensable if we are to say whether or not a sentence is correct, a proposition is legitimate, or a speech act fulfils its requirement. In other words statements should be seen as:

> *"…a function of existence that properly belongs to the sign and on the basis of which one may decide, through analysis or intuition, whether or nor they 'make sense' according to what rule they follow one another or are juxtaposed, of what they are the sign, and what sort of act is carried out by their formulation (oral or written)" (Foucault, 1972/2006: 97).*

On this premise Foucault argues that it is useless to look for the statement among unitary groups of signs, as it is not *per se* a unit, but a function cutting across a domain of structures and possible unities. This function he calls *the enunciative function*. The statement is that which enables groups of signs to exist (as a syntagma i.e. as a whole) and enables rules of construction and forms of succession and permutation to become manifest. Statements should in other words not only be seen as functions giving meaning to units of a linguistic type, but as enunciative functions relating various units (sentences or fragments hereof, propositions, series of signs, a set of propositions or equivalent formulations) to a field of object, opening up for a number of possible subjective positions, placing them [the units] in a domain of coordination and coexistence, and placing them in a *space* in which they are used and repeated.

Foucault (1972/2006: 99-118) elaborates these arguments through the description of four main characteristics of the statement – and of the difference between statements, signs, and languages: a) a series of signs becomes a statement if it possesses 'something else' – a specific relation that concerns itself, b) a statement possesses a particular relation with a subject; c) the enunciative function cannot operate without the existence of an associated domain; and d) a statement must have a material existence. On the topic of the 'something else' Foucault (1972/2006: 100) tells us that the relation a statement possesses with what it states is not identical with a group of rules of use. Should two identical sentences appear, whether simultaneously however independently in space or in succession, it is not necessarily the same statement. Likewise, neither the relation of a proposition to its referent nor the relation between a sentence and its meaning can be used to serve as a model for the relation of a statement to what it states. Instead the relation that characterises the statement as a statement should be defined in terms of its link to a 'referential' made up of laws of possibilities, rules of existence for the objects

named, and for the relations affirmed or denied in it (Foucault, 1972/2006: 103). What this in other words implies is that the referential defines the possibilities of appearance and delimitation of what gives meaning to a sentence – the enunciative function of the formulation of sentences.

A statement also differs from linguistic elements in that it possesses a particular relation with a subject in the form of an author or a transmitting authority who emits signs. The subject of a statement is however not identical with the author of the formulation, as the author cannot be viewed upon as the origin or cause of the phenomena. The subject is instead a particular vacant place that may be filled by different individuals:

> *"If a proposition, a sentence, a group of signs can be called 'statement', it is not therefore because, one day, someone happened to speak them or put them into some concrete form of writing; it is because the position of the subject can be assigned." (Foucault, 1972/2006: 107).*

The third function of the enunciative function is that it cannot operate without the existence of an associated domain, which makes the statement something other than a mere collection of signs. Foucault (1972/2006: 110) argues that a statement always has borders peopled by other statements, however the borders should not be thought of as context in its usual sense being the situational and linguistic elements that motivate a particular formulation and determines it meaning. What Foucault here is arguing is that the *associated* or *enunciative field* of the statement is broader than this. It is, instead, made up of the series of formulation within which the statement appears and forms one element. Furthermore does the statement include all the statements to which it refers by repetition, modification, adaptation, opposition etc., all the formulations it makes possible; and all the formulations that share its status. If one thus can speak of a statement it is because a sentence appears at a definite point in an enunciative function that extends beyond it (Foucault, 1972/2006: 112).

Finally, Foucault argues that for a sequence of linguistic elements to be regarded as a statement it must have a material existence, by which he means that the *coordinates* (either in time or space) and the *material status* (e.g. written in a novel or spoken in the course of a conversation) are a part of the intrinsic characteristics of the statement – almost, anyway for Foucault tells us that these characteristics also are shared by sentences and propositions. What however separates statements (as

unities) from sentences and propositions are the fact that materiality plays a much more important role in the former:

> *"It is constitutive of the statement itself: a statement must have a substance, a support, a place, and a date. And when these requisites change, it too changes identity." (Foucault, 1972/2006: 113).*

Further, an enunciation takes place whenever a group of signs is emitted. The enunciation is an unrepeatable event meaning that it has an irreducible situated and dated uniqueness. Foucault (1972/2006: 115-116) claims that the materiality of the statement is not defined by the space occupied or the date of its formulation, but rather by its status as a thing or an object. Thus, two copies of a book may contain the same statements, however a person speaking a sentence in the course of daily conversation and who later reproduces it in writing in a book is not making the same statement, as the identity of the statement varies with a complex set of material institutions. Thus, the enunciative function has a *repeatable materiality* that according to Foucault reveals the statement as a specific and paradoxical object that instead of being something said once and for all:

> *"…appears with a status, enters various networks and various fields of use, is subjected to transferences or modifications, is integrated into operations and strategies in which identity is maintained or effaced." (Foucault, 1972/2006: 118).*

The rule of materiality that statements necessarily obey is therefore of the order of the institution, and the statement thus becomes what Foucault calls a theme of appropriation or rivalry, and it is the description of the rules of this process of appropriation and rivalry, which constitutes the archaeological project.

Archive

On the relations between statements, Foucault argues that these are too complex, heterogeneous, shifting, and dispersed to be linked together and "…*simulate, from one period to another, beyond individual œuvres, a sort of great uninterrupted text."* (Foucault, 1972/2006: 41). Rather than looking for similarities in statements according to their theme, concepts, or objects Foucault argues that one has to seek regularities in the system of dispersion of statements:

> *"Whenever one can describe, between a number of statements, such a system of dispersion, whenever, between objects, types of statement, concepts, or thematic choices, one can define a regularity (an order, correlations, positions and functionings, transformations), we will say for*

> *sake of convenience, that we are dealing with a discursive formation – thus avoiding words that are already overladen with conditions and consequences, and in any case inadequate to the task of designating such a dispersion, such as 'science', 'ideology', 'theory', or 'domain of objectivity'." (Foucault, 1972/2006: 41; original emphasis).*

Thus, in order to describe the unity of a discourse one is lead to a project of describing regularities in the dispersion of statements, which according to Andersen (1999; 41-42) is somewhat problematic, as there is an ontological asymmetry between the statements and the discursive formation. The reason for which is that the statements exist positively whereas regularity, the discursive formation, is constructed by the discourse analyst in the course of analysis. The primary analytical problem thus becomes a question of when regularity is a regularity that can be described as a discursive formation. The key in answering this question lies in the concept of *the archive*. According to Andersen (1999: 47, own translation, original emphasis):

> *"It is a question of constructing the archive as what ultimately regulates what has been said and not said in a particular society. Which discursive formation specific statements' dispersion is a regularity of can of course not be determined in advance. As a discourse analyst one has to take the long and meticulous road though the archive in order of saying anything about the construction of specific discursive formations."*

Or in the words of Foucault (1972/2006: 146-148, original emphasis):

> *"It is the general system of the formation and transformation of statements…The never completed, never wholly achieved uncovering of the archive forms the general horizon to which the description of discursive formations, the analysis of positivities, the mapping of enunciative field belong. The right words – which is not that of the philologists - authorizes, therefore the use of archaeology to describe all these searches."*

One therefore has to establish the archive as the basis for the exploration or rather construction of the discursive formation. This is by no means an easy task, as it ultimately requires that one ought to read and study anything as it is not possible to fix the limits of the discursive formations in advance. It is almost trivial to make the point that it of course is not possible to actually study any available material; however, Foucault makes some interesting and very relevant reservations on the topic of how to establish the archive. The 'archaeologist' should not limit himself to choosing neither texts located within a specific oeuvre nor texts based on a specific

theme, e.g. 'partnering' as themes in the statements can be formed in ways which cannot be predicted *ex ante* and furthermore can change over time. In other words, we seem to be caught in a Catch-22 situation where we on the one hand cannot study the entire archive of our society and on the other hand cannot make any 'beforehand' delimitation of which elements in the archive we should limit our analysis to. Andersen (1999: 48) suggests that we return to the statements as the point-of-departure in this task. That we should follow the statements' references and the references' references as broadly as possible in both space and time until they seem to constitute a 'closed whole.' Furthermore the archaeologist should refrain from reading only 'canonic' oeuvres, which the history of ideas has identified. Thirdly, one should not make a distinction between official and private sources, as if the private sources are 'outside' the discourse. Conversely, it is not *comme il faut* to make any *ex ante* judgements on the validity of different sources relative to one another. Along these lines it is also apparent that scientific articles and books cannot be considered the sole source of the study. Rather, the archaeologist has to consider statements, which describes discourses as practices specified in the archive; statements originating from within the various institutions in the field. The establishment of the archive is thus to a great extent a question of being personally satisfied or convinced by the legitimacy or credibility of one's own argumentation. The archive can be said to be created in an almost hermeneutical fashion when all the parts (here statements) have been satisfactory related to the 'whole'; when all further investigations seem to yield only futile results. With the archive in place it is now possible to proceed with investigating the discursive formations:

> *"Only when the whole corpus of statements has been pieced together is it possible for us to raise the question of how one or more regularities in the irregular dispersion of statements emerges, in other words how the dispersion of statements over time seems to be regulated by different discursive formations." (Andersen, 1999: 48, own translation).*

Here we return to the notion of *rules of formation*; the rules being conditions of existence in a given discursive division, or in other terms rules of acceptability for when a statement is accepted as a reasonable statement (Andersen, 1999: 49).

Formation

Here I will highlight the four types of rules of the formation of regularities in statements. Focus is placed on presenting the implications of Foucault's archaeological approach, rather than the exact contents hereof.

Hence, when dealing with the formation of objects the main question is how statements form objects as they do. Using the term 'object' Foucault refers not so much to physical objects or a reality outside the speaking, thinking subject, rather he refers to the idea of a 'discourse object' – that is an object of knowledge, which in the established oeuvres of science, politics, religion etc. has assumed an almost taken-for-granted status. Objects are not stable as they are continually transformed and shaped in daily practice, so for Foucault the examination of the formation of objects become a question of what has ruled their existence as objects of discourse (Foucault, 1972/2006: 45). Foucault suggests that one should take on three tasks: map the surfaces of emergence of objects, describe the authorities of delimitation, and analyse the grids of specification. The mapping of surface of emergence involves an examination of where:

> *"…individual differences, which according to the degrees of rationalization, conceptual codes, and types of theory, will be accorded the status of disease, alienation, anomaly, dementia, neurosis or psychosis, degeneration etc., may emerge, and then be designated and analysed." (Foucault, 1972/2006: 45).*

Here, writing against an explicit theme of his book 'Madness and Civilization', Foucault refers to objects of psychiatry as an example of how to deconstruct the rules of existence of different objects within a discourse. Foucault argues that the surfaces of emergence are not the same for different societies, at different periods, and in different forms of discourse. Thus, the object of anomaly in the nineteenth century might have surfaced in the arts as new schools within the field explored and developed new forms of normativity and sexuality, which found their ways into the discourse on psychopathology. In addition to mapping the surfaces of emergence the archaeologist also has to describe the authorities of delimitation. The question is who the major societal authority that delimit, designate, name and establish a given object of discourse is; in other words who has the 'right' to define, which objects are included (or excluded) from the discourse. Referring to the object of madness, Foucault points to e.g. medicine and the law as examples of such delimitating authorities (Foucault, 1972/2006: 46). Considering Foucault's reservations against

only considering official or 'canonical' sources it is not surprising that his view on authority is similar wide, as it not only encompasses formal, governmental authorities but also professional communities and institutions, which have public recognition. Lastly, on the topic of the formation of objects, Foucault states that we also have to consider the so-called *grids of specification* being the systems according to which different discourse objects are divided, contrasted, related, regrouped, classified and derived from one another (Foucault, 1972/2006: 46). In other words, discourse is not characterised by privileged objects but by the way in which it forms objects, which are highly dispersed. This formation is in turn made possible by a group of relations established between authorities, delimitation, and specification.

Next Foucault discusses the formation of enunciative modalities (often referred to as the *formation of subjects*). Enunciative modalities manifest the dispersion of a subject:

> *"…[t]o the various statutes, the various sites, the various positions that he can occupy or be given when making a discourse. To the discontinuity of the planes from which he speaks. And if these planes are linked by a system of relations, this system is not established by the synthetic activity of a consciousness identical with itself, dumb and anterior to all speech, but by the specificity of a discursive practice." (Foucault, 1972/2006: 60).*

The discourses made possible by discursive formations are constituted as practices, integral to which are the enunciative modalities existing at the interface between the discursive and the non-discursive. The laws operating behind the totality of statements concerns the questions of a) who is speaking; b) the institutional site from which the discourse is made, legitimated and applied; and c) the positions of the subject (Foucault, 1972/2006: 55-57). The question of who is speaking is relevant in terms of who among the totality of individuals is accorded the right to use a specific sort of language, who is qualified to do so, and what the status is of the individuals who have the right (sanctioned by law, tradition etc.) to proffer a given discourse. The status of a given individual depends on a number of criteria, including competence and knowledge, institutions, systems, norms, legal conditions etc. In addition we must also consider the institutional sites from which the given individual makes his or her discourse and from which the discourse attains its legitimacy and 'point of application' i.e. its specific objects (Foucault, 1972/2006: 56). Finally, one must consider the subject positions that it is possible to occupy in relation to various domains or groups of objects.

The third type of rules of the formation of regularities in statements revolves around the notion of concepts and involves the description of the:

> *"…organization of the field of statements where they appeared and circulated." (Foucault 1972/2006: 62)*

Andersen (1999: 50, own translation) proposes the following main questions in the examination of the formation of concepts:

> *"How is it that the statements bring some specific concepts into sharper focus and not others? How do concepts order and relate statements? What are the rules for formations of concepts and how do specific discursive formations draw concepts from other formation?"*

The idea is that a statement is only a statement in so far as it relates to other statements. Every statement draws on concepts; however the concept's status as a concept is given by the statement itself in that it establishes a field of associations consisting of all the wordings it refers to – either explicitly or implicitly (Andersen, 1999: 45). Returning to the organisation of the field of statements Foucault argues that it involves three things: *forms of succession*, *forms of coexistence*, and *procedures of intervention*. Forms of succession entails a sensitivity to the various orderings of enunciative series, the various types of dependence of statements and the various rhetorical schemata according to which different types of statements may be combined; in short it is the description of the rules for arranging statements in series in which the recurrent elements that may have value as concepts are distributed (Foucault, 1972/2006: 63). One could call it the accepted conventions of communication within a social field. The configuration of the enunciative field also involves a description of the forms of coexistence outlining a field of presence, a field of concomitance and a field of memory. These fields designate respectively: a) all statements formulated elsewhere and taken up in a particular discourse; b) statements associated with other domains of objects but which are taken up as they serve a specific purpose; and c) statements rendered obsolete as they are no longer accepted or discussed. Finally, Foucault tells us to define the procedures of intervention being the procedures governing techniques of rewriting, methods of transcribing, modes of translating, means used to increase the approximation of statements, and the methods of systematising statements. The aim of this task is to determine according to what schemata statements may by linked to one another in a type of discourse, and thus discover how the recurrent elements of statements transform and constitute partial organisations among themselves (Foucault,

1972/2006: 67). Concepts in Foucault's terminology can thus be seen as what structure statements or refer them to a coherent conceptual understanding of a particular object. Bjerke (2001) suggests that the analysis of the formation of concepts should be seen as an attempt to delimit and analyse forms of thought; the underlying rationale of a discourse. We could also pose this analysis as a question of investigating problem representations proposed in different discourse with specific emphasis on deconstructing presuppositions grounding the problem representation.

The last layer of analysis associated with the description of discursive formations centres on the formation of strategies. On the topic of strategies Andersen (1999: 46, own translation) writes:

> *"A statement is only a statement if it is integrated in operations or strategies in which the identity of the statement is maintained or fades out. A statement is not simply the said independent of time, place and materiality. A statement always chooses a materiality, at least in the form of a medium for its production e.g. speech, writing, report, apparatus, or picture…It is strategic in that sense that the statement as a reactualisation appears as a choice among other possible actualisations."*

Andersen (1999: 50-51) furthermore explains that the question of formation of strategies per definition is interdiscursive; that it is a question of how particular discourse formations are created in relation to other discourse formations; that there is a continual battle and competition, and at the same time a mutual constitution, between different discourse formations. The description of the rules of formation of strategies is thus a question of describing the unity of the mutual exclusion of discursive formations. To accomplish these tasks three directions of research into the formation of strategies must be followed: a) determining the possible points of diffraction of discourse; b) studying the economy of discursive constellation to which the strategy belongs, and c) determining the function of discourse in a field of non-discursive practices. The study of the points of diffraction constitutes a study of different responses to similar problems and practices. Secondly, Foucault advices us to study the economy of the discursive formation to which the discourse belongs. The questions are: of all the possible architectures that might have emerged, of all the responses that could have materialised, how come this particular choice was made and who are the specific authorities that guided this choice? Especially relevant is the examination of modifications in the principles of exclusion and choice; a modification, which in Foucault's (1972/2006: 75) words is due to an

insertion in a new discursive constellation. The determination of the actual choices made is however also dependent upon *another authority* characterised by: a) the function of the discourse in a field of non-discursive practices; b) the rules and processes of appropriation in terms of who has the right to speak, the ability to understand, and the access/capacity to invest in the discourse; and c) the possible positions of desire in relation to discourse, i.e. how to influence discourse according to our own desires, interests etc.

Upon finishing his discussion of the elements of discursive formation Foucault argues that statements can be seen as:

> *"…the operational field of the enunciative function and the conditions according to which it reveals the various units of discourse" (Foucault, 1972/2006: 120).*

Having come to this understanding Foucault now asks the questions of how to describe statements and how to use this theory of the statement to analyse the discursive formations.

On the question of describing statements Foucault argues that three tasks are in hand; fixing the vocabulary, defining the conditions in which the function that gave a series of sign an existence can operate, and describing the enunciative level of language.

In fixing the vocabulary Foucault embarks on a rather tedious and meticulous task of, once again, defining key terms such as formulation, statement, discourse and discursive statement. However, rather than just reiterating and rephrasing previously mentioned terms Foucault offers an expanded and precise definition of *discourse*, which he in his own words has:

> *"…used and abused in many different senses: in the most general, and vaguest way, it denoted a group of verbal performances; and by discourse, then, I meant that which was produced (perhaps all that was produced) by the groups of signs. But I also meant a group of acts of formulation, a series of sentences or propositions. Lastly – and it is in this meaning that was finally used (together with the first, which served in a provisional capacity) – discourse is constituted by a group of sentences of signs, in so far they are statements, that is, in so far they can be assigned particular modalities of existence" (Foucault, 1972/2006: 120-121).*

Second, Foucault argues that the statement can only be described by defining the conditions in which the function that gave series of signs a specific existence can operate. The statement can thus not be described in itself as it is not visible. Nor is

the statement, on the other hand, hidden since it characterises the modalities of existence proper to a group of signs. The analysis of statements is rather a *historical* analysis that avoids interpretation. For any statement maybe there however be something unsaid, but this unsaid ought to be seen as exclusions, limits or gaps being part of the conditions of the emergence of statements rather than as expressions of a hidden meaning immanent to the statement.

Third, though the statement is not hidden, Foucault states that is not visible either; that it requires a certain change of viewpoint to be recognised and examined. There are three reasons for this. As previously discussed, the reason is that the statement is a function of existence rather than just another unity as sentences or words. Another reason is that the signifying structure of language always refers back to something else. In Foucault's words (1972/2006: 125):

> *"Language always seems to be inhabited by the other, the elsewhere, the distant; it is hollowed by absence."*

As such, traditional, linguistic methods or logical analyses fall short of analytical or explanatory power. What is needed is an enunciative analysis, which intersects these traditional methods and opens up for an analysis of language as statements. The analysis of discursive formations, Foucault (1972/2006: 129) argues, is in reality centred on the description of statements in their specificity, and in examining the statement a function, having a bearing on groups of signs, has been discovered. This function, however, operates not on the basis of grammar or logic but on that of a referential (a principle of differentiation), a subject (a position that may be filled in certain conditions by various individuals), an associated field (a domain of co-existence for other statements), and a materiality (rules of transcription and possibilities of use and re-use).

Accepting these operating principles discursive formations can be perceived of as groups of statements linked at the level of the statement rather than that of the sentence level, the proposition level, or the formulation level. This in terms implies that one can define the general set of rules that:

- Govern the objects of statements
- Govern the different modes of enunciation
- Are common to all the associated domains of the statements
- Govern the status of statements and the ways in which they are institutionalised.

Arguing that describing statements is to uncover the discursive formation, Foucault now advances a number of propositions that lie at the heart of the analysis. First, that the mapping of discursive formations and the description of statements are equally justifiable and reversible; that one leads to the other. Second, the regularity of statements is defined by the discursive formation to which it belongs. Third, a full meaning can now be given to the definition of discourse, which is:

> *"…a group of statements in so far as they belong to the same discursive formation…it is made up of a limited number of statements for which a group of conditions of existence can be defined." (Foucault, 1972/2006: 131)*

This group of conditions of existence, also referred to as the operation of a single system for the formation of statements, or the set of conditions in accordance with which a practice is exercised, Foucault names the *positivity* (Foucault, 1972/2006: 141). From the above definition also follows that Foucault can define discursive practice more precisely as:

> *"…a body of anonymous, historical rules, always determined in the time and space that have defined a given period, and for a given social, economic, geographical, or linguistic area, the conditions of operation of the enunciative function." (Foucault, 1972/2006: 131)*

How these different elements of the archaeological approach come into play in a specific archaeological analysis will be discussed in the following chapter, where I also will focus on the use served by the archaeological approach, both in general as well as in relation to the specific task I have set out to analyse in this thesis.

The archaeological contribution

> *"It is now of the utmost importance that I should measure the descriptive efficacy of the notions that I have tried to define. I must discover whether the machine works, and what it can produce. What, then, can this 'archaeology' offer that other descriptions are unable to provide? What are the rewards for such a heavy enterprise?" (Foucault, 1972/2006: 152).*

Archaeological description is an abandonment of the traditional history of ideas, a systematic rejection of its postulates and procedures; it is an attempt to practice a quite different history of what men have said. This is in essence how Foucault (1973/2006: 154) perceives the role of his approach, and in order to fully appreciate it, one has to understand the Foucauldian notion of history of ideas.

Although admitting to the difficulties of characterising a discipline like the history of ideas, Foucault sets of his description in the two roles it seems to possess; the recounting of byways and margins of history, and to deal and interpret with the boundaries of existing disciplines from the outside.

On the first topic Foucault states (1972/2006: 153) that his interest is not in the history of science, rather in the history of ill-based knowledge; knowledge that could never attain the form of 'scientificity' being the themes that are never crystallised in a rigorous and individual system "…*but which have formed the spontaneous philosophy of those who did not philosophise."* In other words not the history of literature but that of tangential rumour, that everyday, transient writing that never acquires the statues of an *oeuvre* whether sub-literature, almanacs, reviews and newspapers. The history of ideas is thus concerned with all insidious thought and revealing the crumbling soil on which great discursive moments are based. It is the discipline of fluctuating languages, of shapeless works, and of unrelated themes; the analysis of opinions rather than knowledge and of types of mentality rather than on forms of thought (*Ibid.,* 1972/2006: 153).

However, at the same time history of ideas does, in Foucault's eyes, set to out cross the boundaries of existing disciplines. History of ideas describes the knowledge that has served as an empirical, unreflective basis for subsequent formalisations, and in doing so it tries to rediscover the immediate experience that discourse transcribes thus giving birth to systems and *oeuvres*. In this sense the history of ideas becomes the discipline of beginnings and ends, the description of continuations and returns, and the reconstitution of developments in the linear form of history. It does however also describe the interplay of exchanges and intermediaries from one domain to another showing how scientific knowledge is diffused, gives rise to philosophical concepts, and shows how problems, notions and themes emigrate from philosophy to scientific and political discourses. History of ideas thus becomes:

> *"… the discipline of interferences and the description of concentric circles that surround works, underlie them, relate them to one another, and insert them into whatever they are not" (Ibid., 1972/2006: 154).*

In contrast:

> *"Archaeology is not in search of inventions; and it remains unmoved at the moment (a very moving one, I admit) when for the first time someone was sure of some truth; it does not try to*

> *restore the light of those joyful mornings. But neither is it concerned with the average phenomena of opinion, with the dull grey of what everyone at a particular period might repeat." (Foucault, 1972/2006: 161).*

What archaeology instead is interested in is to uncover the regularity of a discursive practice. This is according to Andersen (1999: 41) the basic guiding epistemology in Foucault's archaeological strategy of analysis. Regularity is however not the opposite of irregularity. Rather regularity designates, for every verbal performance, the set of conditions in which the enunciative function operates, and which defines its existence. For Foucault every statement bears a certain regularity from which it cannot be dissociated. This means that instead of opposing the regularity of a statement with the irregularity of another, one must oppose it to other regularities characterising other statements. Hence, every statement belongs to a formation.

This analysis of enunciative regularities opens up in several directions. In distinguishing between *linguistic analogy*, *logical identity,* and *enunciative homogeneity* Foucault argues that archaeology alone is concerned with enunciative homogeneity:

> *"It [archaeology] can see the appearance of a new discursive practice through verbal formulations that remain linguistically analogous or logically equivalent...Inversely, it may ignore differences of vocabulary, it may pass over semantic fields or different deductive organizations, if it is capable of recognizing in each case, despite their heterogeneity, a certain enunciative regularity." (Foucault, 1972/2006: 162).*

What the archaeology therefore can accomplish is a description of relations and interdependencies between enunciative homogeneities (and heterogeneities), linguistic continuities (and change) and logical identities (and differences) in a highly complex domain.

Another direction of research concerns the interior hierarchies within enunciative regularities. According to Foucault every statement puts into operation a whole set of rules in accordance with which its object, its modality, the concepts it employs, and the strategy of which is a part, are formed. The problem however is that these rules are never given in a formulation, rather they traverse, cross or intersect formulations. As such one cannot discover the statements that would articulate the rules; however we are at hope, as a certain group of statements puts the rules into operation in a general and applicable form. Using these types of statements as a starting-point, Foucault tells us that one can see how other objects, concept, modalities or strategies may be formed on the basis of rules, which are less general

and specified, making possible the description of the *tree of enunciative derivation of a discourse*.

A second fundamental distinction between archaeology and history of ideas concerns the stance taken towards contradictions, coherence and discontinuity. Where Foucault accuses the history of ideas for assuming an underlying coherence to the discourse, and thus tries to wipe out irregularities by trying to find a deeper meaning or system of coherence, archaeology on the other hand embraces irregularities and contradictions, not as appearances to be overcome or secret principles to be uncovered, but as objects to be described for themselves. In this respect archaeological analysis:

> *"…does not try to discover in their place a common form or theme, it tries to determine the extent and form of the gap that separates them. In relation to a history of ideas that attempts to melt contradictions in the semi-nocturnal unity of an overall figure, or which attempts to transmute them into a general, abstract, uniform principle of interpretation or explanation, archaeology described the different spaces of dissension." (Foucault, 1972/2006: 170; original emphasis maintained).*

Archaeology is concerned with the intrinsic oppositions or contradictions that are deployed in the discursive formation itself and reveal sub-systems, i.e. ways of forming statements with respect to types, levels and functions of oppositions. Archaeological analysis in other words individualises discursive formations.

Further, archaeological analysis compares discursive formations, opposes them to one another, distinguishes them from other formations not belonging to the same time-scale and relates them to the non-discursive practices that surround them. This is a very interesting statement by Foucault, as he now opens up for a discussion previously left somewhat in the dark, namely that of the relationship between discursive and non-discursive practices. Let me however return to this topic in a moment, and instead focus on the comparative project of the archaeological approach and its differences from other types of descriptions. First of all, the archaeological approach operates on the basis of limited and regional comparisons trying to outline particular configurations rather than general forms. The relations that one describes in the course of an archaeological analysis are only valid in order to define a particular configuration; as such they are in the words of Foucault (1972/2006: 176) not signs to describe the face of a culture in its totality. The number of possible networks, of particular configurations, is defined during the

analysis, and the horizon of archaeology is thus a tangle of interpositivities; archaeology is a comparative analysis not having a unifying, but a diversifying effect. Secondly, archaeology wishes to uncover the so-called play of analogies and differences as they appear at the level of rules of formation. This implies the following five tasks:

1 To show the *archaeological isomorphisms* between different formations, i.e. showing how different discursive elements may be formed on the basis of similar rules.
2 To define the *archaeological model* of each formation, i.e. show how rules of formation are applied in different discourses.
3 To investigate the *archaeological isotopia* of different concepts, i.e. show how entirely different concepts occupy a similar position in the ramification of their system of positivity.
4 To indicate *archaeological shifts*, i.e. to show how a single notion may cover two archaeologically distinct elements.
5 To establish *archaeological correlations*, i.e. to show how from one positivity to another relations of subordination or complementarity may be established.

Third, archaeology aims at revealing relations between discursive formations and *non-discursive domains* among which Foucault mentions institutions and economic practices. It does so in order to discover the domain of existence and functioning of a discursive practice; to discover the whole domain of institutions, economic processes and social relations on which a discursive formation can be articulated; to show how discourse as practice:

> *"…concerned with a particular field of objects, finding itself in the hands of a certain number of statutorily designated individuals, and having certain functions to exercise in society, is articulated on practices that are external to it, and which are not themselves of a discursive order." (Foucault, 1972/2006: 182).*

Here we touch on one of the biggest items of controversy in the debate on Foucault's archaeology: the problematic treatment of the discursive as opposed to the non-discursive. In *AK*, Foucault argues that statements are not speech acts, however according to Sawyer (2002: 438) this claim was based on a misunderstanding of speech act theory; a misunderstanding Foucault later acknowledged. Foucault's correction of the nature of statements also led to a

clarification of the term discourse (as used in the Archaeology of Knowledge), which he in his inaugural lecture '*L'ordre du discours*' now defined as:

> *"…really only an activity, of writing in the first case, or reading in the second and exchange in the third…[These activities] never involve anything but signs." (Foucault, 1971 in Sawyer, 2002: 438) .*

Sawyer argues that although Foucault in passages itemizes some of the non-discursive practices that relate to discourse, they are at the same time explicitly excluded from consideration in the Archaeology of Knowledge. It was only later that Foucault's interest shifted away from discourse and towards non-discursive practices. Sawyer notes that Foucault's avoidance of the terms 'discourse' and 'archaeology' in his latter works is remarkable; however on the few occasions where Foucault actually uses the term 'discourse' he does so stressing that discourse is always embedded within non-discursive practices, and that discourse is used only to describe specific instances of language use (Sawyer, 2002: 441). This can e.g. be witnessed in the *Résumé des cours* (1971/2001a) where Foucault writes that Archaeology analyses discourse at the level of the discursive practices, which are described as:

> *"…not purely and simply ways of producing discourse. They are embodied in technical processes, in institutions, in patterns for general behavior, in forms for transmission and diffusion, and in pedagogical forms which, at once, impose and maintain them." (Foucault, 1971/2001a: 52).*

At the same time Foucault argues that the transformation of discursive practices is:

> *"…linked to a whole range of usually complex modifications that can occur outside of its domain (in the forms of production, in social relationships, in political institutions), inside it (in its techniques for determining its object, in the adjustment and refinement of its concepts, in its accumulation of facts), or to the side of it (in other discursive practices)." Foucault (1971/2001a: 52).*

Archaeological analysis of discourses in other words seeks to discover the whole domain of institutions, economic processes and social relations on which a discursive formation can be articulated. In doing so, it constitutes an attempt to uncover the particular level in which history can give place to definite types of discourse.

This understanding of the transformation of the discursive practice Foucault proposes can be said to be ahead of its time in that Foucault here acknowledges that what lies as the basis of his analysis is the *dispositive* or the *apparatus* rather than statements, archives and epistemes; in other words non-linguistic as well as linguistic elements. The term dispositive is otherwise often linked to the works of the 'later Foucault', most notably in the History of Sexuality (1976/2006). Foucault (1977: 194) defined the use of the term dispositive as:

> *"…a thoroughly heterogeneous ensemble consisting of discourses, institutions, architectural forms, regulatory decisions, laws, administrative measures, scientific statements, philosophical, moral and philanthropic propositions – in short, the said as much as the unsaid. Such are the elements of the apparatus. The apparatus itself is the system of relations that can be established between these elements."*

What Foucault attempts to identify in this apparatus is the nature of the connection that can exist between the heterogeneous elements. He argues that a particular discourse can function differently at different times; at one time as the programme of an institution, and at another time as a means of masking a practice, opening out for a new field of rationality. Finally, Foucault argues that the dispositive should be understood as a formation, which has as its major function to respond to an urgent need at a given historical period:

> *"The apparatus thus has a dominant strategic function. This may have been, for example, the assimilation of a floating population found to be burdensome for an essentially mercantilist economy: there was a strategic imperative acting here as the matrix for an apparatus which gradually undertook the control or subjection of madness, sexual illness and neurosis." (Foucault, 1977: 195).*

The dispositive is in other words always inscribed in a play of power, which governs the development of specific discursive formations. As such the dispositive can be seen as the apparatus, which actualises one of many strategic possibilities (Andersen, 2003). This is what lies at the heart of Foucault's ideas of historical change and transformations, discussed below, as well as the genealogical approach, which will be discussed later. Hence, according to Foucault discourse is always embedded in non-discursive practices and what this implies is that when one addresses change one cannot work completely from within the discourse or based on an idea of a speaking, acting subject:

> *"Discourse, at least as analysed by archaeology, that is, at the level of its positivity, is not a consciousness that embodies its project in the external form of language (langage); it is not a language (langue), plus a subject to speak it. It is a practice that has its own forms of sequence and succession." (Foucault, 1972/2006: 187, original emphasis).*

The form and succession of discourse is thus not that of the linear model of speech or that of the model of the stream of consciousness. Archaeology is interested in discontinuities, ruptures, gaps and sudden redistributions and seeks to *"…untie all those knots that historians have patiently tied*" (Foucault, 1972/2006: 187). Archaeology however is not interested in increasing differences; rather it refuses to reduce them and seeks instead to *differentiate* them. In doing so, one should establish the system of transformations that constitutes change through a description of the transformation of the elements of a system and the relations as system, as well as of the rules of formation and the positivities. It is, however, an important observation Foucault makes, when he recognises that a general transformation can take place without all the elements necessarily being altered. Thus, some elements may remain identical, yet belong to a different system of dispersion. This could be (Foucault, 1972/2006: 191-192):

- *"...elements that remain throughout several distinct positivities, their form and content remaining the same, but their formations being heterogeneous"*
- *"…elements that are constituted, modified, organized in one discursive formation, and which, stabilized at last, figure in another"*
- *"…elements that appear later, as an ultimate derivation in discursive formation, and which occupy an important place in a later formation"*
- *"…elements that reappear after a period of desuetude, oblivion, or even invalidation"*

The differentiation of differences can be accomplished through an analysis of the dispersion of continuities themselves. Foucault thus maintains that the idea of a single break, suddenly and at a given moment, diving all discursive formations cannot be sustained. Rather, any transformation has its own particular index of temporal 'viscosity' (Foucault, 1972/2006: 193). The temporal viscosity can in this sense be understood (partly) as a function of non-discursive practices, in that the pace of change is highly diminished as the network of non-discursive practices, constituting the outside of discourse, grows more complicated.

Although having been preoccupied with the sciences, *The Archaeology of Knowledge* is not to be seen as an analysis of sciences, rather a much more fundamental analysis of knowledge itself:

> *"If one calls 'disciplines' groups of statements that borrow their organization from scientific models, which tend to coherence and demonstrativity, which are accepted, institutionalized, transmitted, and sometimes thought as sciences, could one not say that archaeology describes disciplines that are not really sciences, while epistemology describes sciences that have been formed on the basis of (or in spite of) disciplines?" (Foucault, 1972/2006: 196-197).*

No, Foucault argues. A discursive practice, with its own regularity and consistency, can be in operation despite the absence of any established discipline making a discursive formation and a *positivity* (the operation of a single system for the formation of statements or the set of conditions in accordance with which a practice is exercised) accessible for description. Discursive formations can be identified neither as existing sciences, or prefigurations of sciences to come, nor as forms excluding any scientificity from the outset. What then is the relation between positivities and sciences? Rather than characterising forms of knowledge or defining the state of knowledge at a given moment in time, positivities form the precondition of what is later revealed and functions as an item of knowledge, an accepted truth or an exposed error. This precondition is a group of elements that:

> *"…would have to be formed by a discursive practice if a scientific discourse was to be constituted, specified not only by its form and rigour, but also by the objects with which it deals, the types of enunciation that it uses, the concepts that it manipulates, and the strategies that it employs." (Foucault, 1972/2006: 201).*

This group of elements formed by a discursive practice can according to Foucault be called *knowledge*. What this means is that there can (and do) exist bodies of knowledge that are independent of the sciences, however there is no knowledge without a particular discursive practice, and any discursive practice can thus be defined by the knowledge it forms. Furthermore, instead of understanding knowledge as *connaissance* (as a particular corpus of knowledge in the form of a scientific discipline) archaeology sees knowledge as *savoir* (that is as conditions that are necessary in a particular period for a given type of object to be given a formal body of rules; a disciplinary status). Based on this distinction Foucault suggests that it is understandable in this condition to distinguish carefully between *scientific domains*, being constituted by propositions based upon a systematicity, obeying

certain laws of construction, and *archaeological territories*, which may extend to 'literary' and 'philosophical' texts as well as scientific ones. Archaeology in other words, considers a much broader knowledge base as its field of inquiry than the history of ideas that confines itself only to science. This has at least one very practical implication for the design of an archaeological study in that it tells us to avoid a one-sided focus on scientific material as the sole source for the empirical study. If one fails to widen the 'textual' scope we risk to lapse into an analysis of the interior of an intension or to uncover an interpretation on basis of which we can say nothing about the conditions of operation of the enunciative function. Science is thus localised in a field of knowledge (*savior*) and has a specific role to play herein; a role that varies according to different discursive formations and is modified with the mutations of the formations. Foucault suggests, although he is not quite convinced, that it is in the space of interplays between science and knowledge that the relations of ideology to science is established. The hold of ideology over scientific discourse and the ideological functioning of sciences are so to speak "…*articulated where science is articulated upon knowledge*" (Foucault, 1972/2006: 204); ideology is an 'immanent' feature of science; a condition of existence from which follows that the ideological functioning of sciences should be examined as a discursive practice among other practices.

That archaeological analysis should not be seen as an analysis of sciences is also evident in the light of Foucault's discussion of the notion of *thresholds*. Accordingly, in becoming a science a discursive formation crosses a number of thresholds: the threshold of positivity (the moment at which a discursive practice achieves individuality and autonomy), the threshold of epistemology (the moment at which the discursive formation claims to validate and exercise a dominant function over knowledge), the threshold of scientificity (the moment at which the discursive formation articulates its own rules), and the threshold of formalisation (the moment at which the scientific discourse, taking itself as a starting-point, is able to deploy the formal edifice it constitutes). The mapping of these multiple thresholds makes distinct forms of historical analysis possible. 'Recurrential analysis' works from the basis of established sciences, once these have crossed the threshold of formalisation, and describes the history of a science in terms of the development of its formalised systems. The 'epistemological history' of sciences is situated at the threshold of scientificity and is concerned with the description of how a given concept "…*was purified, and accorded the status and function of a scientific concept*" (Foucault, 1972/2006:

209). The third type of historical analysis, 'archaeological analysis', takes as its point of attack the threshold of epistemologisation. What is attempted here is to uncover discursive practices in so far as they give rise to a corpus of knowledge; to show how the establishment of a science has come about in a discursive formation, and in modifications in its positivity. Finally, 'the analysis of the *episteme*' being: "*The analysis of discursive formations, of positivities, and knowledge in their relations with epistemological figures and with the sciences.*" (Foucault, 1972/2006: 211). By episteme Foucault refers to the totality of relations that can be discovered for a given between the sciences when one analyses them at the level of discursive regularities. The orientation towards the episteme is, however, not the only one open to archaeology. Thus, Foucault readily admits that archaeologies situated 'outside' the episteme could be accomplished as:

> *"What archaeology tries to describe is not the specific structure of science, but the very different domain of knowledge. Moreover, although it is concerned with knowledge in its relation to epistemological figures and the sciences, it may also question knowledge in a different direction and describe it in a different set of relations." (Foucault, 1972/2006: 215, original emphasis maintained).*

As examples of these different archaeologies Foucault suggests the study of sexuality from the direction of 'the ethical' rather than that of the episteme as well as analyses of paintings or political knowledge based not on workings of a whole discursive practice with a domain of objects, a field of possible enunciation, a group of concepts, and a set of choices; rather in the direction of behaviour, tactics, decisions, conflicts etc. When so much attention, however, has been paid to the analytical direction of the episteme it is due to the constant epistemologisation of discursive practices our culture is characterised by:

> *"It is by questioning the sciences, their history, their strange unity, their dispersion, and their ruptures, that the domain of positivities was able to appear; it is in the interstice of scientific discourses that we were able to grasp the play of discursive formations." (Foucault, 1972/2006: 215).*

When this is said, it is however important to notice, that Foucault in the Archaeology of Knowledge not confines himself completely to the level of the episteme, the discursive, the articulable but already has opened the door for an analysis of the visible (Deleuze, 2006: 28), and thus the *dispositive*, which will be discussed in the following chapters.

2.2 Genealogy: knowledge, power and subjectivity

The archaeological enterprise is, however, not only a question of measuring the mutations that operate in general in the field of history – it is just as much an attempt at describing the constitution of the subject. As Heede (2004) comments on the AK:

> *"Popular speaking, a main point in this respect is that the subject does not create the discourse, rather that the discourse creates the subject, i.e. delineates a variety of different possible positions to speak from in a given context; makes a variety of different of predetermined positions available to the speaking subject." (Heede, 2004: 74, own translation).*

It is in this light that we should understand Foucault as he argues that *AK* is an enterprise by which one tries to throw off the last anthropological constraints – the subject as the privileged origin of discourse. Rather, with Foucault, subjects are subordinated to regimes of truth/practices that structures and regulates what can be thought and said. In the *AK* it is the episteme having this function. Here the subject of the statement neither is a speaking consciousness, nor the author of the proposition, but a *position* or a series of positions, which in principle can be occupied by anyone. Subjectivity is in other words constituted by discourse, and rather than seeing the subject as an autonomous entity, it is *decentred*. What this means is that the individual no longer is a subject in its own right; instead an individual is constituted as a subject by accepting the subject positions, which continuously are offered to us by different discourses or instances of language use. This process, also called *interpellation* or *hailing* (Alvesson and Skjöldberg, 2001: 164), should be seen as a structural feature of ideological practice consisting of a collection of institutions referred to by Althusser (1971) as *Ideological State Apparatuses* and by Foucault (1991) as *disciplinary institutions*. These institutions can be seen as structural or rather non-discursive facets of *disciplines*, technologies of power, which aim at controlling or regulating masses; however with a subtle difference. Whereas Althusser's interpellation constitutes a process of subjection, discourse or the disciplines at Foucault constitutes a process of subjectivation, implying a fundamental difference or point of divergence with respect to the question of determinism and subject agency; i.e. whether the subjects has room to manoeuvre within different discourses or if one ideology dominates totally. In differentiating between two primary discourse traditions, the linguistically oriented *discourse analysis* and the politically

engaged *analysis of discourse* Bacchi (2005: 200) argues that it is possible to discern a tension in the understanding of subject agency:

> *"…over whether we ought to think of subjects primarily as discourse users or as constituted in discourse" (original emphasis).*

Foucault's understanding as put forward in *AK* discerns no tension or ambiguity; discourse constitutes subjectivity; not only through verbal utterances but also through material or embodied aspects of discursive practices.

With reference to Foucault's detailed analyses of the formation of the medical discourse in *Naissance de la clinique,* Heede argues that Foucault seeks to exemplify and locate the *historical a priori* system of thought, which, operating behind the back of the subject, structures what can be spoken about and how;

> *"He reveals the historical conditions of existence for the apparent 'belonging to the world' mechanisms, methods of observation, and systems of authority, which imperceptibly and with an apparent automatism controls the speaker's fields of possibilities – long before he or she has opened the mouth or the eyes." (Heede, 2004: 82, own translation).*

In this reading of Foucault discourse can never serve as the decentred subject's last refuge after being deprived their adventures, myths, sub-consciousness, economy, history and social practices by the post-structuralists (Heede, 2004). Foucault's point is that language does not belong to the specific individual; discourse is an occurrence similar to life and death; discourse has a life of its own, a complexity and a reality and creates subjects irrespective of who has the authority to speak. The different forms of speaking subjectivity are effects proper to the enunciative field, and the subject should thus not be seen as the *a priori*, which always exists in the discourse. Rather it is a complex analytical accessible unit, the end product of a discursive process, which can be uncovered archaeologically. According to Heede (2004: 84) the archaeology of knowledge thus introduces the *otherness* in our speech, which excludes the idea that there between the subject and the discourse exists a room for manoeuvre or individual agency. If we accept the absence of a majestic, autonomous subject that cannot take charge of and organise discourse, *that man is dead*, an important and interesting question arises in the form of how we then can understand the production, dissemination and verification of discourses. Heede argues that Foucault in his Archaeology of Knowledge leaves the reader with a plethora of questions and only a frail attempt at an explanation: that of power. Thus, rather than being a tool of the subject, Foucault argues that discourse:

> *"…appears as an asset – finite, desirable, useful – that has its own rules of appearance, but also its own conditions of appropriation and operation; an asset that consequently, from the moment of its existence (and not only in its 'practical applications'), poses the question of power; an asset that is, by nature, the object of a struggle, a political struggle." (Foucault, 1972/2006: 136).*

Power is a facet or more precisely a constituent of discourse; it is a necessary condition of existence for discourse:

> *"One needs to be nominalistic, no doubt: power is not an institution, and not a structure; neither is it a certain strength we are endowed with; it is the name that one attributes to a complex strategical situation in a particular society."(Foucault, 1980: 93).*

This according to Flyvbjerg has two important implications in that questions of who has power and where power is localised becomes irrelevant. Focus is rather on how power is exercised. Here Foucault advances the following five propositions (Foucault, 1980: 94-95):

– Power is exercised from innumerable points, in the interplay of nonegalitarian and mobile relations.
– Relations of power are not in a position of exteriority with respect to other types of relationships (e.g. economic processes); they are immanent in the relationships; they are the immediate effects of the divisions, inequalities, and disequilibriums which occur in the relationships.
– Power comes from below; that is there is no binary and all-encompassing opposition between rulers and ruled at the root of power relations. Furthermore power serves as a general matrix for the manifold relationships of force that run through the social body as a whole.
– Power relations are both intentional and non-subjective. Thus, there is no power that is exercised without a series of aims and objectives; however power does not result from the choice or decision of an individual subject. It is rather constantly being negotiated and translated throughout the entire network of relations.
– Where there is power, there is resistance. The points of resistance are present everywhere in the power network. They pass through apparatuses and institutions, traversing social stratifications and individual unities as well.

Equipped with this understanding, Foucault advances four rules to follow in the study of power. These are not methodological imperatives, rather cautionary prescriptions (Foucault, 1980: 98), which nevertheless gives valuable guidance:

1 *The rule of immanence* stating that between techniques of knowledge and strategies of power there is no exteriority; hence the study of the production of discourses must start from local centres of power-knowledge.
2 *Rules of continual variations* stating that relations of power-knowledge are not static forms of distribution, rather they should be seen as "matrices of transformations" implying that power should not be studied in terms of who has and who is deprived of power. In studying power we must seek out patterns of modifications.
3 *Rule of double conditioning* stating that no local centre of power-knowledge can function if it does not enter into an over-all strategy and inversely, that no strategy could achieve comprehensive effects if did not gain support from precise and tenuous relations serving as anchor points. Thus strategies are conditioned by the specificity of possible local tactics, just as tactics are conditioned by the over-all strategic envelope that makes them work. The local and the global have to be understood *vis-à-vis* each other.
4 *Rule of the tactical polyvalence of discourses* stipulating that discourses are not once and for all subservient to power or raised up against it. A study must make allowance for the "…*complex and unstable process whereby discourse can be both an instrument and an effect of power, but also a hindrance, a stumbling-block, a point of resistance and a starting point for an opposing strategy*" (Foucault, 1980: 100-101).

Thus, for Foucault power is more than a question of law and sovereignty, the so-called *juridico-discursive* understanding of power, which according to Flyvbjerg (1992: 108) is the basic unity, or the locus of power, in the *hobbesian* power-theory, which Foucault parts rather drastically with. Rather than seeing power as being negative, rule based, and reliant of a uniform and visible power-apparatus, Foucault suggests that power should be seen as being positive and productive.

According to Foucault, secrecy is an indispensable element in the operating principles of power; the reason for this being, that power can only be tolerated if it hides itself and the mechanisms through which it functions. This according to Flyvbjerg (1992: 111) leads to the recognition that power cannot be reduced to a question of law or to the writing of a constitution. Power is much more than what

can be contained within the bounds of legal rationality; rather power has developed its own self-maintaining rationality, which according to Flyvbjerg (1992: 111-113) reveals the following binary characteristics of power:

Table 1. The *Foucauldian* understanding of power according to Flyvbjerg (1992: 111-113).

What power is not	What power is
Power is not a group of institutions and mechanisms, which secures subservient citizens in a given state.	Power has to be understood as a plurality of force relations immanent in the sphere in which they operate and which constitute their own organisation. Power is a process that transforms, upholds or overturns force relations through continuous struggles and confrontations.
Power is not a form of subjugation operating on basis of rules as opposed to violence.	Power is the strategies through which force relations gain effects.
Power is not a general system of dominance one group holds and exerts over others. Power, however can take this guise.	Strategies and force relations are local and omnipresent; movable and unstable. Power is dynamic and is produced continuously in all relations.
The effects of power should not be described in negative terms as excluding, repressing, censoring, masking, or concealing.	Power is productive; it produces reality, domains of objects, and rituals of truth.

For Flyvbjerg the concept of strategy crystallises as the central element in interpreting the mechanisms operating in the power relations. Flyvbjerg (1992: 113) proposes that strategy covers three issues:

- Considerations over the means necessary to achieve a certain objective
- How a specific actor seeks to gain advantages over another
- Procedures used in confrontations to dominate other actors

Summarising, Flyvbjerg suggests that strategy should be seen as the totality of means put into operation to implement power effectively or to retain power. This understanding of strategy implies that it is possible to interpret the mechanisms at work in power relationships in terms of strategies. This is a subject, which is often associated with Foucault's so-called genealogical approach. Thus, where archaeology according to Flyvbjerg (1992: 98-99, own translation) can be seen as a: "…*simple disinterested registration and mapping out of the practices as events*" the genealogical process is described as a question of interested understanding the historical and political role played by the studied practices, and the wider consequences they have. Using Andersen's words genealogy is the historical dimension of archaeology; a contemporary history whose objective it is to describe the historical battles and strategies of power under which knowledge and discourses are constituted and

operate (Andersen, 1999: 52-56). In conjunction archaeology and genealogy forms an analysis of formation and transformation of discourse:

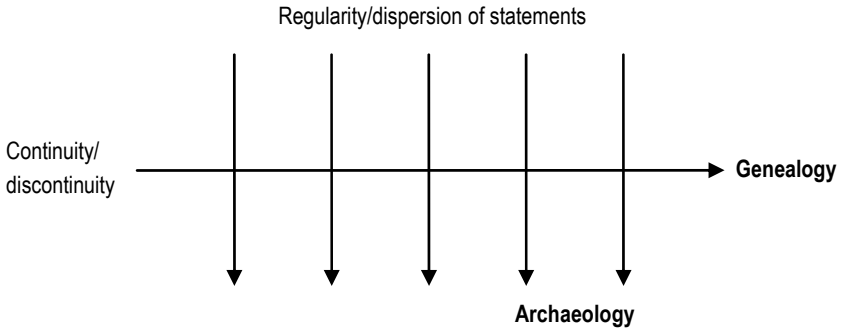


Figure 5. The division of labour between archaeology and genealogy (Andersen, 1999: 63)

Foucault (1976: 85) argues, that:

> *"If we were to characterise it in two terms, then 'archaeology' would be the appropriate methodology of this analysis of local discursivities, and genealogy would be the tactics whereby, on the basis of this description of local discursivities, the subjected knowledges which were thus released would be brought into play."*

Genealogy in other words seeks to problematise and question the contemporary discourses and practices by referring them to the conditions of hegemony and power under which they are established:

> *"Genealogy is the analysis of how one constellation of power-knowledge relations is displaced by another; it attends to the breaks that punctuate history. For all his emphasis on discontinuity, however, Foucault does not regard it as a principle but as a fact concerning certain regions of experience. Foucault's question is not 'how can we prove everything is discontinuous,' but 'why have there in fact been these sudden shifts?' (Shiner, 1982: 387).*

As such, archaeology is argued to represent a synchronous analysis of knowledge, whereas genealogy, building on and from the archaeological approach, adds a diachronous perspective to the analysis. Esmark *et al.* (2005) argue that that genealogical analysis basically can be understood as the historical analysis of the contingent conditions of possibilities for a present event or occurrence; as the attempt to dissolve contemporary 'taken-for-grantednesses' by means of history. Furthermore they argue that for Foucault history writing is fundamentally a history without explanations. Thus, in Foucault's history writing:

> *"…the stories are always marked by ruptures and transitions between structural complexes called discursive formations. The particular formation can be understood as a centre-less network – a regularity in the dispersal as it is also called (Foucault, 1972: 37f). One could however emphasise that Foucault in his later writings was more and more focussed on installing his historical method in an analytics of power and thereby potentially opens up for the idea, that historical configurations can be inscribed in an overarching logic; however not even this seems to ascribe to the historical rupture any form of necessity. The result is more likely that the level of decisive historical change is displaced to the level of the fundamental mechanisms of power we can call dispositives." (Esmark et al., 2005: 34; own translation).*

Before I turn my attention to the notion of the dispositive (already addressed briefly previously) I will give a short presentation and discussion of the genealogical method.

As is the case with the knowledge archaeology, Andersen (2003: 17) argues that genealogy is defined in opposition to traditional historiography in that Foucault assumes Nietzsche's critique of history in which three different methods of historiography is distinguished:

- *The monumental method*, cultivating the connections and continuity of greatness of time.
- *The antiquarian method*, cultivating the past for the sake of the past.
- *The critical method*, standing in the service of life with its starting-point that the past must be broken up and annulled in order to allow the living to exist.

The first two of these methods stands in the service of death, whereas only the latter stands in the service of life. We have already seen Foucault's discontent with the notion of historical continuity, and as it also should be quite clear by now, nor is the idea of cultivating the past for the sake of the past very appealing to Foucault, who in his work is trying to understand the past only in terms of how it constitutes the constraints of the present. One should therefore expect that Foucault would reject any death serving form of historiography and 'opt' for the critical method. Megill in Andersen (2003: 19) however argues that Foucault maintains the distinction between historiographies of life and death in his authorship. According to Andersen (*Ibid.*), Megill refers to the fundamental tension between an Apollonian respectively a Dionysian analytical-strategic approach in Foucault's works, the former being that of the systematic archaeology whilst the latter, the Dionysian, is that of genealogy – a strategy "…*concerned with discontinuity, which brings on life and undermines presuppositions*"

(Andersen, 2003: 19). Accepting, or rather acknowledging, that the archaeological approach in Foucault's own words is a systematic description of a discourse-object, I, however, find that Megill's statement is, if not a misunderstanding, then an improper 'historiographical labeling', which does not bring credit to Foucault's archaeological method and furthermore is contributing to maintaining an analytical distinction at Foucault, which does not serve a 'productive' end. As an example, remember Foucault's (1971) argument from *Nietzsche, la généalogie, l'historie* that genealogy is:

> *"…grey, meticulous, and patiently documentary. It operates on a field of entangled and confused parchments, on documents that have been scratched over and recopied many times." (Cited in Andersen, 2003: 23).*

Thus where the two 'approaches', archaeology and genealogy, both can be argued to operate on the basis of the same rigorous methods and systematic approaches, the distinction made by Megill must have been made with reference to the perceived purpose of the methods; i.e. to construct a regularity or to demonstrate a 'discontinuous continuity'. This is however also problematic if one instead reads the archaeology as the first and necessary step, or as the methodological precondition, of all Foucault's own analyses, whether these are labelled archaeologies or genealogies; in this case, the archaeological method as pure description, as a systematic, Apollonian antiquarian or monumental historiography is simply a non-option. This is also observed by Villadsen (2002: 29) who argues that there is no reason to make a sharp distinction between archaeology and genealogy, which at most can be described as two sides of the same analytical perspective – and that the archaeology, as already accounted for previously, also involves a diachronic perspective in its analysis of transformations and comparative descriptions. Instead Villadsen suggests that the archaeology/genealogy could be viewed accordingly in a Foucauldian method for critical historical sociology:

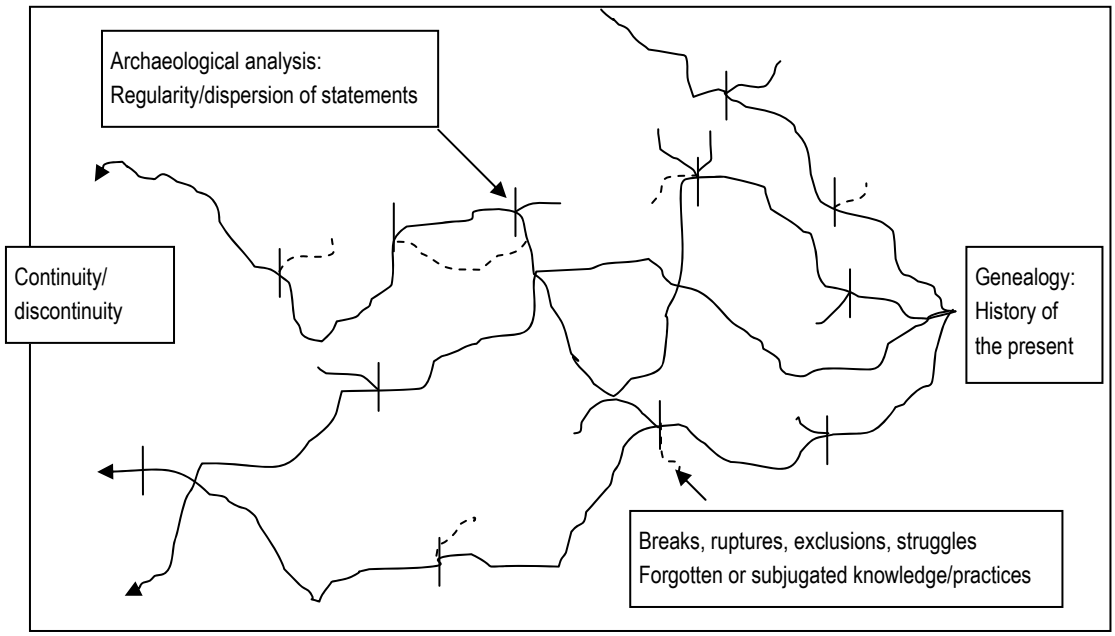


Figure 6. Foucault's method for critical historical sociology (adapted from Villadsen, 2002: 29).

Having said that, I am aware that archaeology, as previously argued, constitutes an attempt to uncover the particular level, in which history can give places to definite types of discourse, however it does so with more than an eye for a critical investigation of current practices and problematic – as an element in the prescription of possibilities of resistance and the creation of change in the light (or rather shadow) of perceived structural complexes and hegemonies. This is especially evident when taking the overall understanding of Foucault's writing as proposed by e.g. Jensen (2007) and Raffnsøe (2001; 2003; 2006), who completely dissolves the distinction between an early Foucault and a late Foucault, which especially Dreyfus and Rabinow (1983) have been instrumental and cardinal in maintaining (Raffnsøe and Gudmand-Høyer, 2004: 4), and instead read Foucault's writings as a succession of analyses and discussions of power modalities and systems of governance, placing the concept of the dispositive in the analytical centre.

2.3 The dispositive: historicising social technologies

According to Raffnsøe and Gudmand-Høyer (2004: 4) the dispositive is the a cross-cutting and binding concept in Foucault's writings, in fact they argue that the concept is so fundamental that Foucault in his lectures at the Collège de France from 1978 points to the necessity of observing all of history as a dispositive history – as well as all of his writings as attempts to uncover and articulate a series of

historically constituted dispositives, which governs our actions and practices today. There is thus no obvious sudden nor gradual turn in Foucault's analytical attention from the episteme, as a historical *a priori* system of thought, which operating behind the back of the subject, structures what can be spoken about and how, to that of the dispositive with its visible technologies and instruments of power. Rather, the episteme should be seen as a dispositive of a specific discursive character:

> *"…the episteme is a specifically discursive apparatus, whereas the apparatus in its general form is both discursive and non-discursive, its elements being much more heterogeneous. […] If you like, I would define the episteme retrospectively as the strategic apparatus, which permits of separating out from among all the statements which are possible those that will be acceptable within, I won't say a scientific theory, but a field of scientificity, and which it is possible to say are true or false." (Raffnsøe and Gudmand-Høyer, 2004: 27-28; quotation with original emphasis from Foucault 1977, 197).*

Raffnsøe and Gudmand-Høyer (2004) launches a stern attack on Dreyfus and Rabinow's (1983) otherwise critically acclaimed book on Michel Foucault entitled "*Michel Foucault. Beyond structuralism and hermeneutics*" for failing to provide justice to both the term dispositive as well as Foucault's use of it – and hereby also on their 'cross-reading' of Foucault's philosophical leitmotif and agenda.

According to Raffnsøe and Gudmand-Høyer (2004: 5), Dreyfus and Rabinow argue that the concept of the dispositive is an excessively vague term, which leaves too much undecided, and that their translation of 'dispositive' to 'interpretative analytics' is an extremely dissatisfactory substitution, which methodologically speaking operates on an incorrect level in that it emphases interpretation as the primary element in Foucault's analytics. What makes Raffnsøe and Gudmand-Høyer (2004: 4, 37) claim that Dreyfus and Rabinow's critique of Foucault's use of the dispositive is wrongful builds on two fundamental misunderstandings. First, that they apparently lack knowledge of nature of the concept and the meaning the term dispositive, and secondly that the dispositive is not an interpretation, but a result.

Raffnsøe and Gudmand-Høyer (2004: 7-9) argue that the use of the term dispositive does not represent an arbitrary neologism at Foucault, but rather a reinterpretation of a commonly used concept in the French language. They therefore present three lexical meanings (as well as a single philosophically situated use) of the word as summarised below:

Table 2. Lexical meanings of the term dispositive in four different contexts (Raffnsøe and Gudmand-Høyer, 2004: 7-9).

Context	Lexical meaning
Military	The dispositive as a collection of means or initiatives as they are ordered according to a plan or strategic objective.
Legal	The dispositive as: — the closing part of a ruling, which stipulated the legal consequences of the verdict, or — the closing operative part of a legal or administrative text, which specifies the issued decree's relevance and effect.
Technical	The dispositive as: — the way in which the parts of an apparatus is distributed, which causes the apparatus to function in a given way, or in continuation hereof — the functioning or 'mechanism' of such an apparatus: the way in which it affects its surroundings.
Philosophical	Concept previously used by Lyotard, Deleuze and Guttari.

Further they argue that this common and familiar collection of interrelated meanings of the word must have been well-known for Foucault as he in the latter part of the 1970's started using the term, as he at the same time places his own use in continuation of the common usages as well as expands it by generalising it to an overarching concept. Rather than seeing the dispositive as an excessively vague heterogeneous concept, which leaves too much unresolved and rather should be reconceptualised as an interpretive analytics, Raffnsøe and Gudmand-Høyer (2004: 8-9) and Raffnsøe (2006: 26) suggest that the dispositive should be seen as a general systematisation or a social technology (although void of any substantial nature), which prescribes or more precisely *disposes* particular kinds of social outcome without determining them completely. Raffnsøe (1999) also phrases this role of the dispositive in the following manner, which reveals its kinship with the methodological presuppositions with Foucault's Archaeology of Knowledge:

> *"With the dispositives, a certain regularity in the manner in which social actions and occurrences relates to previous actions and occurrences is portrayed." (Raffnsøe, 1999: 48; own translation; emphasis added).*

Dispositive analysis thus emerges as a matter of depicting the current sociality as an interplay between dispositives by means of historical awareness – as such Raffnsøe and Gudmand-Høyer (2004: 10) argues that dispositive analysis is a dispositive history; a history of the dissemination and interplay of social technologies. This sociality, this analysis of the social technologies has to be understood both in terms of content and expression, things and words, seeing and speaking, the visible and the articulable as Deleuze (2006: 41) puts it.

For Foucault the study of social technologies consists of more than an analysis of the institution and subsequent disbanding of specific means by which we process or relate to the world. More important, it entails an analysis of the rationality, or in Andersen's (2003: 27) words the *strategic logic*, deploying the technologies. Hence, the subject of the dispositional analysis extends to an examination, mapping out, and exposition of the different dispositives' or social technologies' functioning within the constellations of which they are a part (Raffnsøe and Gudmand-Høyer, 2004: 11-12). The dispositional analysis thus emerges as an unmasking of how a complex social exchange constitutes, runs through, and changes a society's central institutions and knowledges, i.e. the visible and the articulable, which according to Deleuze (2006:42) is presented as the generalised theory of the two elements of stratification in Foucault's *Archaeology of Knowledge* – the discursive formations and the non-discursive formations. In doing so, it analyses social exchange as interplay between different dispositives deployed throughout history of sociality, thus making the dispositive analysis a critical historiography by means of an analysis of positivities, i.e. an analysis of conditions of existence or conditions in accordance with which a practice is exercised.

At the same time that Foucault argues for the need to analyse history as a dispositive or technology history, he introduces three fundamental dispositive modalities, which are given a central explanatory position in his works, being *law (or legal system)*, *discipline* (*or disciplinary mechanisms*) and *security (or security apparatuses)* (Foucault, 2004; 2007; Raffnsøe and Gudmand-Høyer, 2004; Jensen, 2005a). Modality can refer to a variety of different things from one scientific discipline to another; however I suggest that seeing it as the basis or conditions for the production of authority and meaning, and thus normativity (Raffnsøe, 2006: 38), within given social spheres, may be an appropriate interpretation. Any dispositive, any social technology is inscribed with a modality, and does at the same time extend this modality into specific parts of the social.

Law, argue Raffnsøe and Gudmand-Høyer (2003: 13), can be seen as a dispositive which has had great impact on the history of sociality in so far as it represents an attempt to establish and maintain an explicit division between prohibition and permission. As such it is described as a prescriptive technology prescribing a certain binary order within which the social has to conform. When law is asserted, the social is adapted by drawing a line between wanted and unwanted, informing the unwanted that it is unwanted.

Discipline, on the other hand, deals with pre-emptive technologies. It is a technology of the body, which:

> *"…produces individualizing effects, and manipulates the body as a source of forces that have to be rendered both useful and docile." (Foucault, 2004: 249).*

Furthermore, whereas law operated on basis of a binary division, discipline splits the social into minute elements (Jensen, 2007: 508) – it measures, arranges, rearranges, and orders. Disciplinary technologies shape the current sociality (practices, individuals, etc.) with a view to the future. The dispositive of discipline is perhaps most notably in Foucault's genealogy of the penal system presented in the book '*Discipline and Punish: The Birth of the Prison.*'

Thirdly, we have the dispositive of *security*, which aims to establish a homeostasis by achieving an overall equilibrium that protects the security of the whole from internal dangers (Foucault, 2004: 249). The implementation of security generating dispositives operates not on the difference wanted/unwanted with the intent of eradicating the unwanted; rather, they seek to establish a general preparedness for the conduct and treatment of the unexpected and the arbitrary, thus forestalling any devastating consequences (Raffnsøe and Gudmand-Høyer, 2003: 15). Furthermore, and perhaps even more interesting in this respect is that Foucault suggests that

> *"While discipline operates through the enclosure and circumscription of space, security requires the opening up and release of spaces to enable circulation and passage." (Elden, 2007: 565).*

In his lectures entitles '*Security, Territory, Population*' Foucault (2007) extends the discussions of these three basic modalities inserting them into a context of *governmentality*, analysing the foundations and constitution of the domain of political knowledge or reason in much the same way that the episteme and the domain of scientific knowledge had been his focus in 'The Order of Things.'

Governmentality (Fr.: *gouvernementalité*) is a neologism adapted by Foucault from Roland Barthes, who used it to denote an ideological mechanism that presents the government as the origin of social relations (Lemke, 2007: 44). In Dean's reading (1999) of Foucault's use of the term, it represents a composition and a contraction of 'governmental rationality' whilst playing on the idea of mentalities of government. Governmentality[2] thus can be seen both as a way of observing practices of

2 In a lecture in 1978 Foucault puts forward three definitions of governmentality. These are:

government as well as the means by which we: "…*think about governing others and ourselves in a wide variety of contexts*…" (Dean, 1999: 209).

In the governmentality literature, it is often argued that Foucault deployed the concept of governmentality as a guideline for a genealogy of the modern state or more broadly statecraft (Jessop, 2007) ranging from Ancient Greece up until contemporary forms of neo-liberalism (Lemke, 2007). According to Villadsen (2002: 12), Foucault (1991) argues that a gradual transformation took place in the 16th to 18th century in the conceptions of what it means to exercise government in a wise and expedient fashion. *Machiavellian* concerns or reflections on how the central authority (the prince) can maintain and stabilise sovereign power of the territory are superseded by a rationality of government, which seeks to optimise the strength of the state and the welfare of the population. Raffnsøe (2006: 32) puts this in the following way:

> *"…the logic of power began to be conceived of as a logic of governmentality at the point where attempts were made to articulate the problematic of the exercise of power as something independent of, and lying beyond the horizon of, the problematic of law, and with the attempt to work out the unique, intrinsic logic of the exercise of power itself."*

With the focus on governmentality, Foucault attempted to develop a new way of understanding politics, which focuses neither exclusively on the micro-physics of power nor on the macro-physics of power, but is observing the dialectic relationship between these two spheres. Jessop (2007: 36) thus suggests that Foucault wanted to explore: "…*the historical constitution and periodization of the state and the important strategic and tactical dimensions of power relations and their associated discourses.*"

An important element in using the concepts of *dispositives* and *modalities* when applying Foucault's governmentality studies in examining the formation and functioning of a distinct social technology is that one should be careful in not understanding development as a straightforward linear phenomenon. As Foucault (2007: 8) tells:

— *"...the ensemble formed by institutions, procedures, analyses and reflections, calculations, and tactics that allow the exercise of this very specific, albeit very complex, power that has the population as its target, political economy as its major form of knowledge, and apparatuses of security as its essential technical instrument." (Foucault, 2007: 144).*

— *"...the tendency, the line of force, that for a long time, and throughout the West, has constantly led towards the pre-eminence over all other types of power – sovereignty, discipline, and so on – of the type of power that we can call "government" and which has led to the development of a series of specific governmental apparatuses (appareils) on the one hand, [and, on the other]† to the development of a series of knowledges (savoirs)." (Foucault, 2007: 144).*

— *"...the process, or rather, the result of the process by which the state of justice of the Middle Ages became the administrative state in the fifteenth and sixteenth centuries and was gradually "governmentalized." (Foucault, 2007: 144).*

> *"So, there is not a series of successive elements, the appearance of the new causing the earlier ones to disappear. There is not the legal age, the disciplinary age, and then the age of security. Mechanisms of security do not replace disciplinary mechanisms, which would have replaced juridico-legal mechanisms. In reality you have a series of complex edifices in which, of course, the techniques themselves change and are perfected, or anyway become more complicated, but in which what above all changes is the dominant characteristic, or more exactly, the system of correlation between juridico-legal mechanisms, disciplinary mechanisms, and mechanisms of security."*

However, rather than just studying the history of actual specific techniques, e.g. the disciplinary technique of putting someone in a cell, which according to Foucault (2007: 8) was already frequently employed in the *juridico-legal* age, there is another history which could be studied, being the history of technologies, i.e.:

> *"…the much more general, but of course much more fuzzy history of the correlations and systems of the dominant feature which determine that, in a given society and for a given sector […] a technology of security, for example, will be set up, taking up again and sometimes even multiplying juridical and disciplinary elements and redeploying them within its specific tactic." (Foucault, 2007: 8-9; emphasis added).*

It is this history of the correlations and systems of the dominant feature, which is my focus in the second part of the dissertation, where I will examine the formation and functioning of partnering with a strong view to the methodological premises as laid out in the Archaeology of Knowledge. In the third part of the dissertation I will then change perspective slightly and discuss how the strategic logic made available by the partnering dispositive is installed and affects the sociality of a building project. In the next chapter I will, however, discuss how this *Foucauldian* research strategy is pursued in the course of the study by means of interviews, ethnographic investigations and archival research methods.

3. Studying partnering

The aim of this chapter is to give an account of how I have chosen to work with the field - the 'out-there' in order to address my research questions. As such it is not a question of what I can use Foucault's analytics for; rather it is a question of how to do so. Broadly speaking my research strategy consists of three interdependent yet distinct forms or methods of data generation anchored in a case study approach and observed through discourse analytical lenses. Together this model constitutes a *Foucauldian* analytics of partnering.

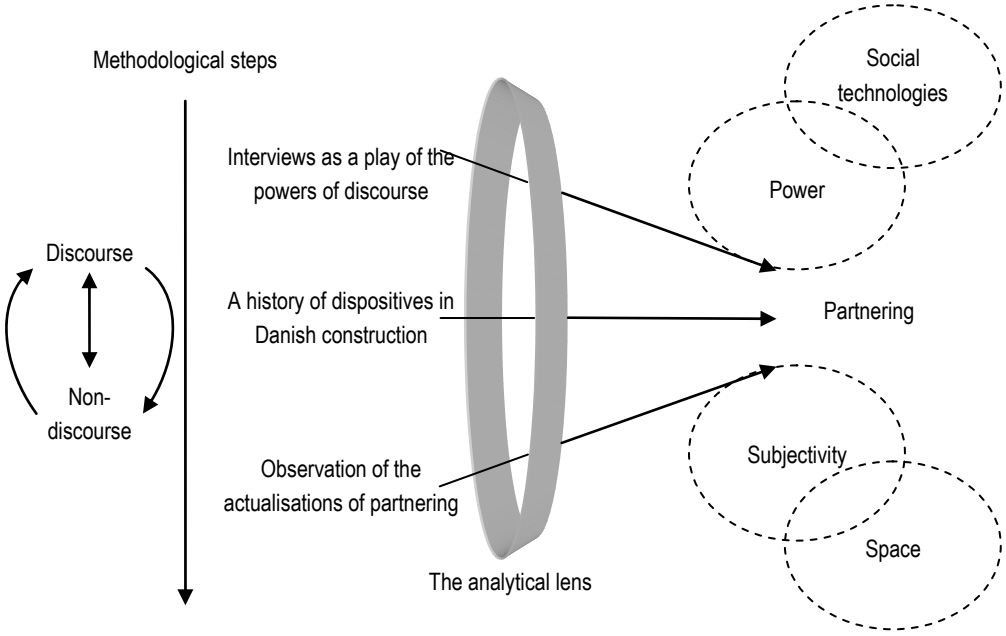


Figure 7. Elements of the research strategy – a framework for inquiry

Below I will argue for the methodological design of the study, with special emphasis on how and why my particular study calls for a case study, and how the different research elements and methods, depicted in the above model, add up to a more or less coherent methodological frame of inquiry.

3.1 A Elements and methods in the research strategy

First of all, the study in hand can be characterised as a case study. A case study can take on many different guises and can according to conventional wisdom, and various authors, be constructed, designed and conducted in so many different ways

that it is almost impossible to point to any common epistemological or ontological grounds. Stake (2000: 435) argues that case studies have become one of the most common ways to do qualitative inquiry, however they are neither new nor essentially qualitative. Rather than being a methodological choice, case studies should be seen as a choice of what is to be studied. Stake (2000) suggests that as a form of research, the case study is defined by an interest in individual cases, not by the methods of inquiry used, and that the basic epistemological question, which drives the case study, is "…*what can be learned from the single case?*" (Stake, 2000: 436). Then, what is a single case? Whether it is simple or complex in its scope, Stake describes it as a *functioning specific*, or a *bounded system*. It is thus common to recognise that certain features are within the observed system, whilst others are on the outside – signified as the case's context. Thus, it can be said that even the preliminary, the first, the spontaneous articulation of the case to be studied results in an ontological construct of how the world is perceived in the eyes of researcher, which in turns has a tremendous impact on the selection, and not least, interpretation of the material constituting the 'researchable' case; in other words how we understand the complexities of the case.

When I first started on this thesis I had a pre-understanding of what I wanted to study, and not least how the study should be accomplished. Needless to say, this has changed not much, yet still significantly in the course of the study. My starting point was that partnering should be understood as more than a simple project management tool, which I believe is the predominant way to go about it in much construction management research, which forms a basic *connaisannce* of partnering. Rather than just considering partnering from the privileged observation point of the project, I instead intended to study partnering as a case of a specific construction policy instrument *vis-à-vis* a specific form of cooperation among construction project participants, thus addressing partnering in the intersection between micro- and macro-practices and power. My primary interest was focused on what happens at these two levels, as well as on the mediating or translating role played by companies and professional business and trades organisations.

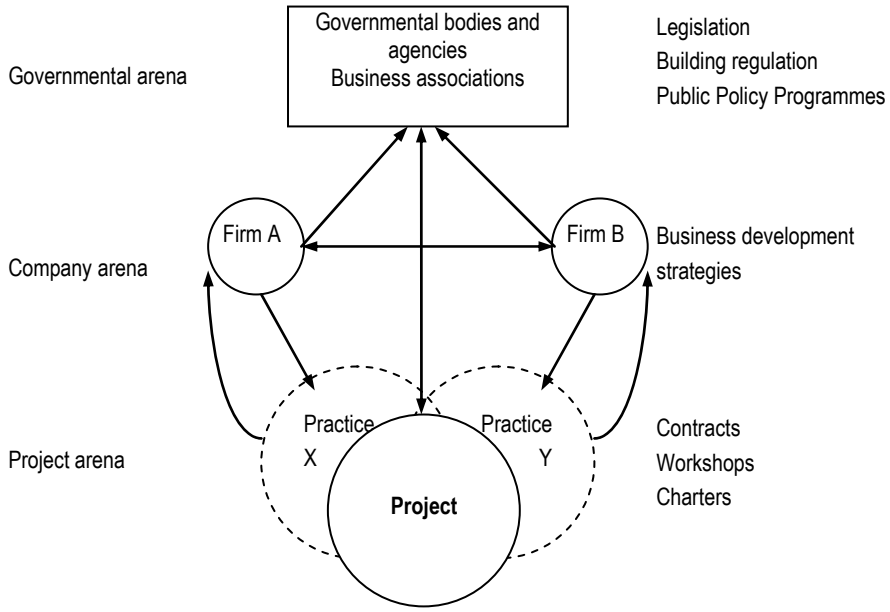


Figure 8. The original tripartite focus on the case of partnering as a policy instrument, company strategy and a project practice

During my theoretical studies of Foucault's philosophy another picture however emerged, which in my eyes provided me with a more satisfactory approach to the study. It had thus been a concern of mine to investigate the 'in-between', the relations between the different arenas, rather than focusing exclusively on the modus operandi of each of the arenas. My concern can be said to be rooted in a personal dissatisfaction with focusing on single islands of local meaning making and homogeneity and the privileged starting point of observing more or less pre-given actors. In addition, I had a 'hobbyhorse' of mine to flog, which evolved more and more clearly throughout the study, being basically the deconstruction of differences.

Where the first concern pertains to a de-ontologisation of the object of study, the last is about showing how differences are contingent, or with Andersen's (2003: VI) words how:

> *"…the 'bar' (/) between two opposing elements, which isolates the one from the other, cannot be maintained. In short, to deconstruct is to demonstrate the impossibility of a difference."*

Continuing the discussion of epistemology and ontology started in chapter one, Andersen (2003) argues that there between these two are different tensions and hierarchies, and that it makes a fundamental difference whether one begins by answering the question of ontology or epistemology. One can thus make a distinction between an ontological over-determination and an epistemological over-determination.

Andersen (2003: XI-XIII) thus argues, that an ontologically over-determined theory is one that starts with the question of being and asks a) what does it mean that something exits?, and b) what are the fundamental possibilities for deciding whether the statement of the theory is true, objective, or scientific? Epistemological over-determined thinking, on the other hand, is of so-called *second order*. It basically asks of how instead of what, e.g. a) in which forms and under which conditions has a certain system of meaning come into existence?; b) what are the obstacles to understanding the possibilities of thinking within an already established system of meaning?, and c) how and by which analytical strategies can we obtain knowledge critically different from the already established system of meaning?

Thus, the argument is that where ontologically over-determined thinking ontologises the subject, the other approach de-ontologises it. What this means is, that by choosing the latter approach, you can work with an empty ontology, i.e. that the object of study is not presupposed (Andersen, 2003: XIII). Even more, through continuous internal dialogue, it lets one actively challenge presuppositions of *reality*, which in my study has led to a downfall of traditional types of accepted actors in construction and their antagonistic relationships. As a result of this focus and my use of Foucault, I operate without a privileged intentional subject once and for all being structurally fixated or determined and possessing a given strategic imperative and working in (pre-)given ways.

The second topic I mentioned as a concern to me is the deconstruction of differences. According to Alvesson and Sköldberg (2001: 153-154) deconstruction is the ironic method used, which lays bare a hidden but decisive weakness in a studied text. Furthermore they argue that the real unity of a deconstructionist study is not the systematic unity openly asserted in the text, but another (hidden and previously repressed) one. As such deconstruction is about undermining differences between the two opposites, or in Andensen's (2003: VI) words, to demonstrate the impossibility of a distinction. Deconstruction thus concerns itself with the unpacking of differences in order to show that they are not differences at all. The reason for taking a deconstructive approach is to challenge different prevailing assumptions of the construction sector, however not as a project of criticism, rather as Derrida (1998) in Andersen (2003: 57) argues, as a means of delimiting ontology.

Deconstruction however cannot be incorporated into discourse analysis, Andersen (2003: 57) argues, as the first "…*refuses to be reduced to simple principles*" whereas the latter "…*reduces and refers the many articulations to a particular system of*

dispersion". There can however be made the following circular relationship between the two:

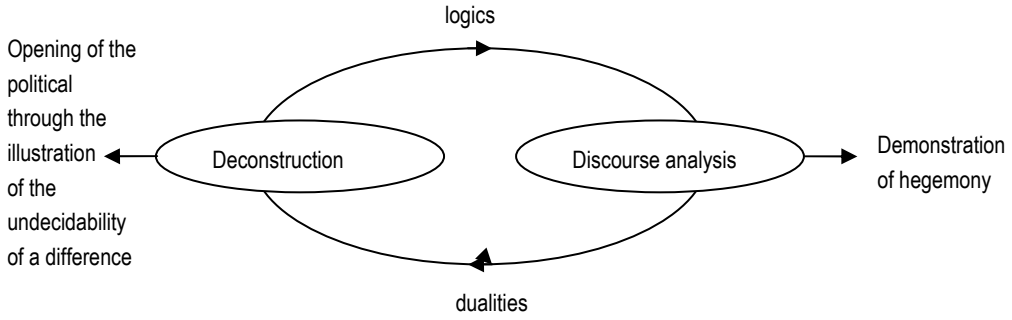


Figure 9. The relationship between deconstruction and discourse analysis (Andersen, 2003: 58)

The argument is that deconstruction pinpoints the mechanisms or logics whose unfolding within the discursive battles of history can be studied in discourse analysis. Discourse analysis, on the other hand, can provide deconstruction with politically central concepts and dualities:

> *"Logics therefore become clues or points of reference for discourse analyses. Discourse analysis analyses the hegemonic constellations within which logics play themselves out. Without logics as deconstructive input, discourse analysis could not obtain the same sensitivity in relation to the central mechanisms or to structural incompleteness." (Andersen, 2003: 58).*

Within a logic of universalism, being based on the deconstruction of the difference universal/particular[3]; a distinction which in Andersen's (2003: 61) can form the basis for studies of how attempts are made to universalise the particular, and how universalisation defines what can be articulated as particular. Laclau (1992) uses the example of how Eurocentrism can be seen as the result of a discourse that did not differentiate between the universal values that the West advocated for and the concrete historical actors that were incarnating them. Now, I do not pretend to deal with issues of this magnitude, however as is demonstrated in the beginning of the second part of the dissertation I have used a similar, albeit more modest, gaze to open up my study. Here I will address the discursive infinity of the policy debate about the construction sector, arguing that any claim for universality or structural fixation of the sector is always particular and contingent, whether we deal with accepted types of actors or specific idiosyncrasies of the construction sector, e.g. that the sector is characterised by a lock-in situation and the absolutism of the

[3] According to Laclau (1992: 90) if the universal is universal it ought to be able to stand alone. He however argues that *"...universality is incommensurable with any particularity yet cannot exist apart from the particular."*

'phase model'. Thus, between the de-ontologisation of the object of study and the contingency of differences, I have chosen to work from the perspective of how partnering functions in the intersection between governance and social practice. The intersection is conceptualised in the form of social technologies aimed at regulating the social. This focus has led to a revision of the original model of analysis as shown below. The labels 'the political' and 'the social' should be taken with some caution, as I do not dare venture into a potentially very long discussion of what 'the political' as opposed to 'the social', both used as singular nouns, means. Rather, I focus on understanding partnering through the dialectic relationship between politics and sociality as a so-called dispositive or system of governance. This could also be seen as the relationship between the *historical a priori* or the strata, i.e. "…*the historical formations, positivities or empiricities*" (Deleuze, 2006: 41) and the strategic zone (Deleuze, 2006: 99) in which the political emerges as an ontologisation of the social.

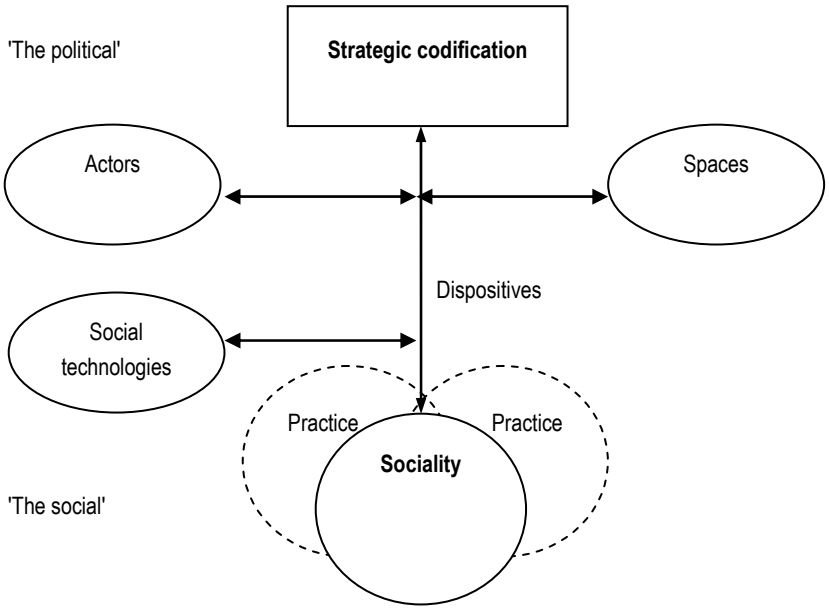


Figure 10. Partnering as a relation operating in the intersection between the political and the social.

This can also be seen in Villadsen's (2002) discussion of political rationality in the works of Foucault, in which he argues that the political consists in the strategic choices or codification (Jessop, 2007) made within various social fields, and that:

> *"Through these choices certain ways of codifying and observing the world are confirmed or supported and other alternative forms of knowledge are excluded." (Villadsen, 2002: 20)*

Analysing partnering from this perspective the remaining dissertation falls in two parts. The second part examines various dispositives in Danish construction as a

setoff for the discussion of partnering and the actualisations hereof in the third part of the dissertation. The dual objectives or focal points of the study in hand (the second part respectively the third part), do in my eyes, call for the mixing of two forms of case studies: the *intrinsic* respectively *instrumental* case study, which should be understood as two distinct heuristics rather than determinative approaches to the study. Stake (2000: 437) describes these two approaches in the following words. First, the intrinsic case:

> *"I call a case study an intrinsic case study if it is undertaken because, first and last, the researcher wants better understanding of this particular case. Here, it is not undertaken primarily because the case represents other cases or because it illustrates a particular case or problem, but because, in all its particularity and ordinariness, this case itself is of interest."*

Second, on the instrumental case, Stake (2000: 437) writes:

> *"I call it instrumental case study if a particular case is examined mainly to provide insight into an issue or to redraw a generalization. The case is of secondary interest, it plays a supportive role, and it facilitates our understanding of something else."*

The case design I construct can be seen as a set of Matryoshka dolls; it is a selection of cases within a case.

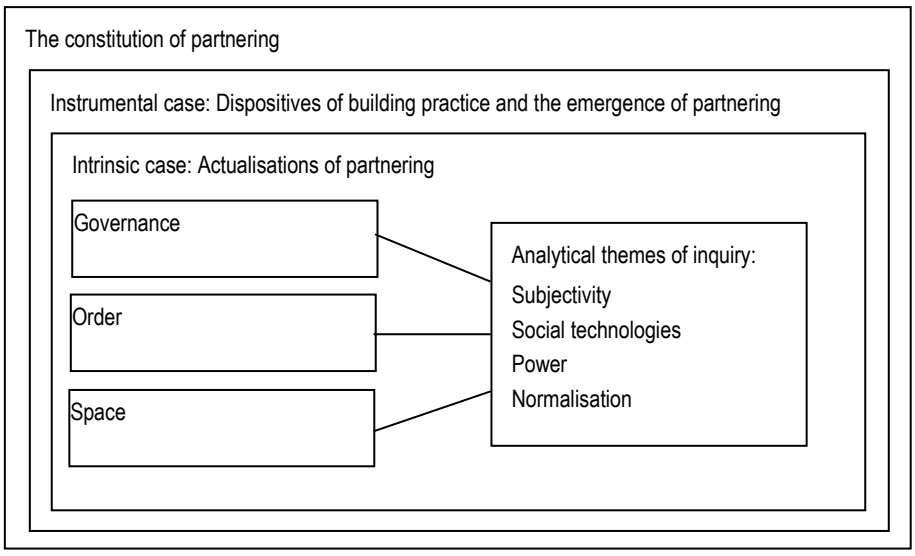


Figure 11. Layers in the case study.

To reiterate and elaborate the previous: the study consists partly of an instrumental case on the construction political development in Denmark, whose aim it is to redraw a generalisation, and facilitate an understanding of the logics and

intentionality operating in the partnering discourse *vis-à-vis* other previous policy developments. The study however also consists of an intrinsic case of partnering as a social system, which formats spaces, structures actions, and produces certain distinct rationalities and subjectivities. As such it is an investigation of partnering as a *dispositive*. Within this framework examining the historical/political development of partnering in a Danish context (both at a 'macro-level' concentrating on the policy arena and at a local-situational level focusing on how partnering is actualised in different social events of the project) is sought to constitute a paradigmatic case (Flyvbjerg, 2006) on the broader issue of how construction policy can be argued to function as a system of governance, which through the functioning of specific social technologies produces certain effects. In the following, I will discuss the methods applied in the different types of cases.

3.2 Archival research methods: constructing the archive

The second part of the dissertation is primarily conducted through an archival research process by using documentary material concerning the examination of different basic dispositives of building practice and politics in Danish construction. In a *Foucauldian* take it is a process of constructing the archive – a process which is discussed in details in the previous chapter. For now, I will only mention the types of archival material used in this study to construct the archive to be used in the analysis of the various dispositives:

- Legislations, law texts, etc.
- Governmental policy papers, task force reports, whitepapers etc.
- Scientific reports and papers concerning the Danish sector.
- Reports, analyses, debate papers, and policies from trade/business organisations.
- Company reports, policies and memos.
- Popular media discourse in the form of newspaper articles from periodicals, journals, etc.
- Project specific documents, e.g. tender documents, contacts, charters of agreement etc.

It is important to note that I treat these different types of documents and texts the same way, which is seeing them as constituted by discourse, thus being subject to

the same types of inquiry. Below is a list of the primary project material accessed during the study.

Table 3. Project material accessed.

Title	Description	Source
Tender program – Façades and free areas	Tender program	Client and process consultant
Assesment report	Assesment of proposals	Client and process consultant
U2 handbook	A guide for active residents	The partnership organisation
Occupant democratic process	A guide to involvement	AlmenNet
Activity plan	Activity plan o. 78	Client and process consultant
U2 evaluation status note	Time- and activity plan	External evaluator
Demonstration project for value creation	Application for evaluation project	Client organisation
Workshop on two new models for handling value and evaluations	Call for PLUS-workshop	PLUS-Network
Account for development themes in the evaluation project	Account for development themes in the evaluation project	PLUS-Network
Workshop participants	PLUS-workshop participants	PLUS-Network
Invitation to 2-day seminar	Program for kick-off workshop	Contracting company
Evaluation scheme U2	Evaluation scheme U2	Client organisation
Program for 2-day seminar	Program + minute from 1st School meeting	Process facilitator
Bucket game	Lean construction explained in game form	Contracting company
Misc. handouts from UM meetings	Misc.	Process facilitator
Midway evaluations	Craftsmen's evaluations of the UM-process so far	Process facilitator

3.3 The field study - a strategically situated ethnography

The third part of the dissertation is concerned with the actualisations of partnering. Potentially, these actualisations could be investigated in a variety of different ways; however I have chosen to conduct an ethnographic inspired case study.

What I am interested in is as previously argued not so much how partnering evolves over the duration of a project, but rather how partnering is actualised in the context of a project. This will hopefully facilitate a twofold perspective. First, to see how forms of power are exercised; secondly, to discuss how subjects can be seen as constituted by discourse – reproducing more powerful discourses in their own immediate context and though their own discursive practices, and rationalise, justify, and legitimise their behaviour.

I start this endeavour by adapting the notion of 'multi-sited ethnography' (MSE) from the work of anthropologist George E. Marcus (1995) relating and elaborating this to fit the specificities of the purpose and theoretical orientation of my own

study. Marcus builds from an understanding of two dominant modes in which ethnographic research has embedded itself "…*within the context of a historic and contemporary world system of capitalist political economy*" (Marcus, 1995: 95-96), the first of which is the commonly used single-sited ethnography, the other the less-developed multi-sited ethnography.

Marcus argues that the single-sited mode of ethnography is an 'ethnography in the world system' by which he means that it is contextualized by certain macro-constructions of larger societal orders, which themselves are outside the scope of the ethnographic study. Instead, single-site ethnography often develops by other means and methods the world system context constituting the "…*contextualizing portraiture in terms of which the predicaments of local subjects are described and analyzed*" (Marcus, 1995; 96).

In contrast to the local and more conventional single-sited ethnography, the multi-sited ethnography works from a completely different perspective earning it the label of a 'postmodern' ethnography being both in and of the world system. This type of ethnography is focussed on examining the circulation of cultural meanings, objects, and identities in what Marcus (1995) calls a diffuse time-space. Furthermore, it defines for itself an object of study, which cannot be accounted for ethnographically by focusing exclusively on a single site of investigation:

> *"It develops instead a strategy or design of research that acknowledges macrotheoretical concepts and narratives of the world system but does not rely on them for the contextual architecture framing a set of subjects." (Marcus, 1995: 96).*

Multi-sited ethnography investigates and constructs the life-worlds of various situated subjects at the same time as it constructs aspects of a system through the associations and connections it suggests itself among multiple sites. We are in other words faced with a co-construction of the local and the global; the phenomenon and the explanatory premise. Marcus (1995) can thus be seen as presenting multi-sited ethnography as a way to 'climb the ladder of discourse' (Alvesson and Kärreman, 2000: 1139) addressing discourse both as a structuring principle of society and subjectivity and as a somewhat local performance or accomplishment.

Multi-sited ethnography takes these "…*connections, associations, and putative relationships*" (Marcus, 1995: 97) as its empirical and analytical strategy. The starting-point is the local and the up-close; one could almost argue that it is in the specificity of a given discursive practice, and in this perspective the point of ethnography is to

discover new paths of connection and association by which "…*traditional ethnographic concerns with agency, symbols, and everyday practices can continue to be expressed on a differently configured spatial canvas.*" (Marcus, 1995: 98). This however entails a number of concerns or anxieties of methodological character on behalf of conventional views on ethnographic methods. These are:

- A concern about testing the limits of ethnography.
- A concern about attenuating the power of fieldwork.
- A concern about the loss of the subaltern.

The concern about the testing of the limits of ethnography is in Marcus' (1995) words to do with the expansion in scope from committed localism to a system much better apprehended by abstract models and aggregate statistics. This is a concern, which Marcus (1995) acknowledges as legitimate; however he does not accept the premises for the concern:

> *"Although multi-sited ethnography is an exercise in mapping terrain, its goal is not holistic representation, an ethnographic portrayal of the world system as a totality. Rather, it claims that any ethnography of a cultural formation in the world system is also an ethnography of the system, and therefore cannot be understood only in terms of the conventional single-site mise-en-scene of ethnographic research, assuming indeed it is the cultural formation, produced in several different locales, rather than the conditions of a particular set of subjects that is the object of study. For ethnography, then, there is no global in the local-global contrast now so frequently evoked. The global is an emergent dimension of arguing about the conceptions among sites in a multi-sited ethnography." (Marcus, 1995: 99).*

Marcus (1995) here, argues for an expansion of the conventional understanding and application of ethnography, opting for something, which at first seems to be a less normative and politicised form of research that runs the risk of being perceived as mechanical and "…*smack of older forms of positivism and of the disengaged positioning characteristic of value-free social science.*" (Marcus, 1995: 99). This is however not what is on his agenda. Rather, he argues that the selection of space and sites of investigation is inseparable from the highly politicised way the problem is understood. What, however, is different is that multi-sited ethnography is not content with blindly following a macro-theoretical path or trajectory, which constitutes context and explanatory regime with which all observations are measured.

The second point of concern is with the possible attenuation of the power of the fieldwork. Marcus asks the question, whether multi-sited ethnography represent a 'degradation' of the traditional virtues of ethnographic fieldwork. This discussion is in my eyes a more or less 'esoteric discussion' within the circles of anthropological academia, as I, as a trained engineer working within the area of social sciences, out of ignorance for the finer details of 'good' ethnographic practice can (and probably will) be accused of 'crimes' against this trade no matter how hard I try to master the complexity of the fieldwork. When this discussion however has been given the place here, it is because it touches upon a couple of central issues in my own study; namely, what does it mean to do fieldwork?

Marcus (1995: 100) argues that multi-sited ethnographies inevitably are the product of knowledge bases of varying intensities and qualities, unlike that of the conventional single-sited ethnography. Not all sites are thus treated by a uniform set of fieldwork practises of the same intensity:

> *"To do ethnographic research, for example, on the social grounds that produce a particular discourse of policy requires different practices and opportunities than does fieldwork among the situated communities such policy affects […] To bring these sites into the same frame of study and to posit their relationships on the basis of first-hand ethnographic research in both is the important contribution of this kind of ethnography, regardless of the variability of the quality and accessibility of that research in different sites." (Marcus, 1995: 100).*

Here Marcus states that multi-sited ethnography produces a different kind of ethnography than does the conventional single-sited ethnography. Without demeaning a certain valorised conception of conventional fieldwork, the knowledge base upon which it rests, and what it can offer Marcus argues that although multi-sited ethnography does threaten to decentre or displace these 'virtues' it still retain the essential function of translation from one language or cultural idiom to another. This function is also a central element in the conventional ethnography; however Marcus argues that it is enhanced in the multi-sited perspective, as it is no longer practiced in a 'them-us' framing. Rather it requires more nuancing and shading, as the so-called practice of translation that connects the various sites of research runs along unexpected and even dissonant fractures of social location.

Finally, on the loss of subaltern Marcus argues that conventional single-sited ethnography: "*…habitually focuses upon subaltern subjects, those positioned by system domination*" (Marcus, 1995: 101). Rather, multi-sited ethnography decentres the

subject and operates without an ontological privileged basis of observation and is thus bound to shift its focus of attention to other domains of cultural production than those conventionally traced to capitalist and colonialist political economy. Rather, multi-sited ethnography is described as a kind of ethnography that maps a new object of study in which previous situated narratives becomes qualified by expanding what is ethnographically in the picture of research – both as it evolves in the field and as it is written up eventually (Marcus, 1995: 102). Further, and perhaps even more interesting, is the question of the function of operation of the comparative dimension in multi-sited ethnography respectively conventional single-sited ethnography. Where the latter operates on a 'linear spatial plane' thus being predominantly diachronic in character, multi-sited ethnography combines both a diachronic and a synchronic analytical perspective. Here 'de facto comparative dimensions' develop instead as a function of a fractured and discontinuous plane of movement and discovery among multiple sites:

> *"Thus, in multi-sited ethnography comparisons emerges from putting questions to an emerging object of study whose contours, sites and relationships are not known beforehand, but are themselves a contribution of making an account that has different, complexly connected real-world sites of investigation. The object of study is ultimately mobile and multiply situated, so any ethnography of such an object will have a comparative dimension that is integral to it, in the form of juxtapositions of phenomena that conventionally have appeared to be (or conceptually have been kept) "worlds apart." (Marcus 1995: 102).*

Multi-sited ethnography is thus inherently interdisciplinary and operates in a landscape, for which there according to Marcus is (as yet) no developed theoretical conception or descriptive model. This however does not mean that there is no help to get in the form of inspiration for multi-sited ethnography. Within the field of postmodernism Marcus e.g. points to Foucault's power/knowledge or heterotopia projects as concepts that:

> *"…anticipate many of the contemporary social and cultural conditions with which ethnographers and other scholars are trying to come to terms in shaping their objects of study in the absence of reliable holistic models of macroprocess for contextualizing referents of research, such as the 'world system,' 'capitalism,' 'the state,' '¨the nation,' etc." (Marcus, 1995: 103).*

Marcus however argues that the high theoretical capital (such as Foucault's power/knowledge) is not the most proximate source for the term by which multi-

sited ethnography is thought and conceived. Rather, multi-sited ethnography is constructed in the terms of specific constructions or discourses that appear within a number of interdisciplinary arenas, which use or capitalise the high theoretical capital to reconfigure the condition for the study in question. How then, are these multi-sited spaces or arenas of investigation within individual projects of research then constructed?

Arenas of investigation in multi-sited ethnography

The construction of a multi-sited space of investigation is a difficult endeavour that in Marcus' words requires a literal discussion of methodological issues. Starting from the point of relationality and connectivity he argues that:

> *"Multi-sited research is designed around chains, paths, threads, conjunctions, or juxtapositions of locations in which the ethnographer establishes some form of literal, physical presence, with an explicit, postured logic of association or connection among sites that in fact defines the argument of the ethnography." (Marcus, 1995: 105)*

Following this logic, the objects of study can be defined through several different modes or techniques, which might be understood as practices of construction through movement, and of tracing an 'initial, baseline conceptual identity' that in the course of tracing turns out to be contingent. Marcus observes a series of techniques to illuminate this process of tracing. Each of these rests on different methodological bases and gives rise to different problems or challenges concerning the operationalisation of a specific research method. I will focus exclusively on the technique I have applied in my study, being 'follow the metaphor.'

> *"When the thing traced is within the realm of discourse and modes of thought, then the circulation of signs, symbols, and metaphors guides the design of ethnography" (Marcus, 1995: 108).*

Constructing the field using metaphors involves an attempt to trace social correlates and grounding of associations that are most clearly alive in language use. This mode of constructing multi-sited research is especially potent for suturing locations of cultural production that have not been obviously connected and for creating empirically argued new envisionings of social landscapes. Noting that Foucault (as cited previously) operates on the level of the discursive practice, that is on a wider scale than 'just' language use, this mode of constructing the field, reveals certain distinct similarities to the approach taken in his works. Marcus exemplifies this

approach by using Emily Martin's 1994-book *Flexible Bodies: Tracking Immunity in American Culture from the Days of Polio to the Age of AIDS* in which the author, taking interest in the variety of discourses on immune system and the ethnographic characteristics of their social location, traces the trope of 'flexibility' through various metaphorically connected locations, on the basis of which she can account for the development of a post-Darwinist subjectivity in the US (Marcus, 1995: 108-109). This is in other words an example of the co-creation of the life-world and the world-system through the articulation of associations and connections between multiple sites much in the same way that Foucault in his *Discipline and Punish* co-constructs the idea of modern disciplinary institutions and the docile bodies, which are ideal for the functioning of the modern industrial age. Studying the actualisation of partnering from this perspective, one is faced with the challenge of choosing the trope to be traced in the study as well as the loci of investigation. As an example, one could focus on the notion of 'flexibility' and its role as a regulatory devise within public construction policy, further exploring theories and practices of construction management as well as ideologies of work and how they are invoked in training programs and as well as on-site, project-specific collaborative efforts such as in workshops or meetings.

Strategically situated single-site ethnography

However, multi-sited ethnography can also be conducted without moving around physically between different spaces or terrain. Marcus calls this the 'Strategically situated (single-site) ethnography.' Some ethnography can thus be stationary yet be embedded in a multi-sited context. What this means is that the sense of the world system beyond the particular site of research is contingent and not assumed; implying that what goes on within the particular locale of research is 'calibrated' with its implication for what goes on in a different locale, even though it is not within the frame of research. The strategically situated ethnography should in Marcus' words be distinguished from the single-site ethnography that examines the local subjects' articulations primarily as subaltern to a dominating world-system. Rather, the strategically situated ethnography attempts to understand as much about the world system as it does its local subjects:

> *"It is only local circumstantially, thus situating itself in a context or field quite differently than does other single-site ethnography." (Marcus, 1995: 111).*

If multi-sited ethnography (or the strategically situated single-site ethnography) does not examine the local subjects' articulations primarily as subaltern to a dominating world-system, then what sorts of local knowledges are probed within the sites? Marcus rephrases the question as follows:

> *"What among locally probed subjects is iconic with or parallel to the identifiably similar or same phenomenon within the idioms and terms of another related or 'worlds apart' site?" (Marcus, 1995: 111).*

Answering this question, Marcus continues, involves the work of comparative translation and tracing among sites, being basic to the methodology of multi-sited ethnography. Marcus does not account for what the actual process of translation involves, however he argues that:

> *"Within a single site, the crucial issue concerns the detectable system-awareness in the everyday consciousness and actions of subjects' lives. This is not an abstract theoretical awareness such as a social scientist might think, but a sensed, partially articulated awareness of specific other sites and agents to which particular subjects have (not always tangible) relationships." (Marcus, 1995: 111).*

Marcus continues from this understanding by providing a number of conceptual discussions as guides to how to see or ethnographically probe a sensibility for the system among situated subjects – a sensibility for "…*iconically identifying a cultural phenomenon in one site that is reproduced elsewhere*" (Marcus, 1995: 111). As examples of this probing of sensibility Marcus mentions e.g. Taussig's essays under the governing notion of 'nervous systems' as well as his ethnographically embedded investigation of Benjamin's 'mimetic faculty,' and Pietz's discussion of Marx's notion of 'fetishism' in the theory of capitalism. In my opinion there are two important contributions towards understanding the project of 'comparative translation' in the above examples Marcus provides. First, there is the installation or use of metaphors as privileged points-of-entry in opening the field, dissolving the borders between sites, and thus redrawing or rewriting the social world. Secondly there is Marcus's explicit reference to Benjamin (1923/2000), who in his famous essay on the *task of the translator* proposes a genealogical understanding of translation, in which translation is seen as a mode. The crux of Benjamin's argument is that:

> *"The task of the translator consists in finding that intended effect upon the language into which he is translating which produces it in the echo of the original. This is a feature of*

> *translation which basically differentiates it from the poet's work, because the effort of the latter is never directed at the language at such, at its totality, but solely and immediately at specific linguistic contextual aspects […] The traditional concepts in any discussion of translations are fidelity and license – the freedom of faithful reproduction and, in its service, fidelity to the word." (Benjamin, 1923/2000: 18).*

What this, in Benjamin's words amounts to, is that a translation instead of resembling the meaning of the original must incorporate the original's *mode of signification* or *representation*. Borrowing the following argument from an analogous discussion by Teubner (2007) multi-sited ethnography can thus be argued to become a task of the translator in which the ethnographer seeks between the different sites, the binding force of the local practices that keeps the possibly centrifugal dynamics of the apparently fractured and discontinuous sites together.

Sites of observation

In the study of the actualisations of partnering presented later, I have chosen to 'eventialise' the so-called arranged or staged co-presence of actors as my primary sites of observation. I use the term eventialise to emphasise that it is an active and strategic choice of mine to turn instances of staged co-presence on the project into actual events that so to say have salience for investigation. These instances of staged co-presence I have followed have been:

– The kick-off workshop.
– The bi-weekly site meetings.
– The weekly planning meetings.

The below table contains the full list of meetings attended. All meetings have been recorded on tape with the participants' consent. In addition, I have been present at some of the project management meetings, which have been held in continuation of the above meetings. I have furthermore spent time on-site doing observations of the physical refurbishment activities.

Table 4. Primary observations on meetings

Eevent	Theme	Date
Construction Site School	Introduction to the new site meetings	22.02.08
Kick-off workshop	2-day kick-off workshop in Ringsted at the contractor	27.03.08 - 28.03.08
UM – 2nd meeting	Reviewing the kick-off workshop	11.04.08
UM – 3rd meeting	Reviewing the kick-off workshop	25.04.08
UM – 4th meeting	Communication	09.05.08

UM – 5th meeting	Communication	23.05.08
UM – 6th meeting	Midway meeting and evaluation	20.06.08
Social summer event	Social summer event	20.06.08
UM – 7th meeting	On the evaluation + revised plan for meetings	22.08.08
UM – 8th meeting	Benchmarking	05.09.08
UM – 9th meeting	Benchmarking and The best site in the world	19.09.08
Weekly planning meeting	Weekly planning meeting	29.09.08
UM – 10th meeting	Benchmarking	03.10.08
Weekly planning meeting	Weekly planning meeting	13.10.08
UM – 11th meeting	Benchmarking	17.10.08
Weekly planning meeting	Weekly planning meeting	26.10.08
UM – 12th meeting	Benchmarking	31.10.08
UM – 13th meeting	Benchmarking	14.11.08
UM – 14th meeting	Benchmarking	28.11.08
UM – 15th meeting	Concluding evaluation	05.12.08

3.4 Interview as research method

The third and final research method used is the qualitative research interview, which the role of gluing the documentary and the ethnographic studies together.

As for the aim of using interviews the objective is two-fold. First, interviews have been conducted focussing on elaborating the political and historical background of the macro-systemic development of the Danish partnering policy. Second, interviews have been carried out focusing on the local-situational context in which partnering is practised. Interviews completed with the former objective in mind have been used to supplement the archival research process, i.e. in conducting the analysis of the emergence and formation of partnering.

The qualitative research interview

Kvale (1997) describes the qualitative interview as a question of:

> *"…providing qualitative descriptions of the life-world of the interviewees with respect to interpretation of their meaning." (Kvale, 1997: 117, own translation).*

Kvale (1997) argues that the qualitative interview can be seen as an inter-personal situation; a specific form of human interaction in which knowledge is developed through dialogue. The interaction is neither as anonymous and neutral as a questionnaire survey nor as personal and emotional as a therapeutic interview. Rather, the qualitative interview is:

> *"…1) centered on the interviewee's life-world; 2) seeks to understand the meaning of phenomena in his life-world; 3) qualitative; 4) descriptive; and 5) specific; it is 6) presuppositionless; it is 7) focussed on certain themes; it is open for 8) ambiguities, and 9) changes; it depends upon the 10) sensitivity of the interviewer; it takes place in 11) an interpersonal interaction, and it may be 12) a positive experience." (Kvale, 1983: 174, cited from Haugbølle Hansen, 1997: 62).*

Research interviews vary in a number of different dimensions, which has to be taken into consideration when designing the study. They can thus be more or less *structured*, ranging from well-structured interviews, following a series of predetermined questions, to more tentative interviews where the focus is on the discussion of specific themes, and the interview resembles a conversation rather than an interrogation. Another distinction can be made according to the dichotomies of *transparency* or *secrecy* i.e. whether the respondent is fully aware of the objectives of the interview and is given direct questions or if indirect questioning and *ex post* unveiling of objectives are chosen.

Kvale (1997:119) furthermore suggests that distinctions between types of interviews can be based on the *specificities of the study*; explorative studies thus tend to be more tentative than e.g. hypothesis testing studies. Further distinction can also be made according to the dichotomies of *description/interpretation* and *intellectual/emotional.* The first of these refers on the one hand to the process of acquiring nuanced descriptions of the investigated phenomena and on the other hand the process of organising and interpreting the descriptions together with the respondent. Concerning the second dichotomy, Kvale (1997: 119) argues that this is a question of either providing rational, analytical explanations on part of the respondent or acquiring the respondent's spontaneous and emotional reactions on a specific topic.

> *"The ideal interviewee does not exist – different persons are suitable for different types of interviews: one can, as witness, pass on correct observations, another can sensitively account for personal experiences and emotions, a third can tell fascinating stories." (Kvale, 1997: 136, own translation).*

With this statement, Kvale punctures the idea that some interviewees are better than others. Rather than seeking interviewees, and subsequently using data only from interviews with people who are jovial, cooperative, well-motivated and provide concise and precise answers, Kvale's crux of the argument is that every potential interviewee can provide valuable information. This, in my eyes, works in three ways:

– One has to consider how to design the interview.
– One has to consider how to conduct the interview.
– One has to consider how to use (analyse) the interview.

This multiplicity of the interview has to be considered prior to conducting the interviews as it will inform the choice and number of interviewees to include in the study as well as have impact on the design of the interview.

Designing the interviews – interviewees and interviewer

Using Kvale's distinction that different people are suitable for different types of interviews, one of the first things to be considered is the match between the overall objectives of the study and the specific interview – or in other words: how to 'use' the interviewee strategically in the study.

Although it goes almost without saying, I will nevertheless address an obvious point: that it is necessary to operate with multiple interview guides differing both *thematically* and *dynamically* due to differences in how they are to be used. Kvale (1997:121-123) suggests that the semi-structured qualitative interview can be understood as an oscillation between thematic respectively dynamic interview questions. Thematically, the interview question addresses issues relevant for the research topic, whereas dynamic dimension of the questioning contributes to the interpersonal aspect of the interview.

Thematically, questions are related to the topic of the interview, to the theoretical assumptions that forms the basis of the study, and to the subsequent analysis, which is conducted. Relating to the topic of the subsequent analysis, Kvale provides two examples of how the scheme of analysis can influence the interview process itself. If one is to conduct some sort of categorisation of the answers Kvale advises to continuously clarify the meaning of the answers according to the categories, which will be used. If one on the other hand opts for a narrative analysis of the interview, the interviewee should be given sufficient room to develop his or her stories and the interviewer should accordingly intervene only with questions, which will elaborate on the most important episodes and patterns. Inquiring into the dynamic side of the interview, the main function of the questioning procedure is to develop a positive and flowing interaction and invite the interviewee to contribute to the conversation.

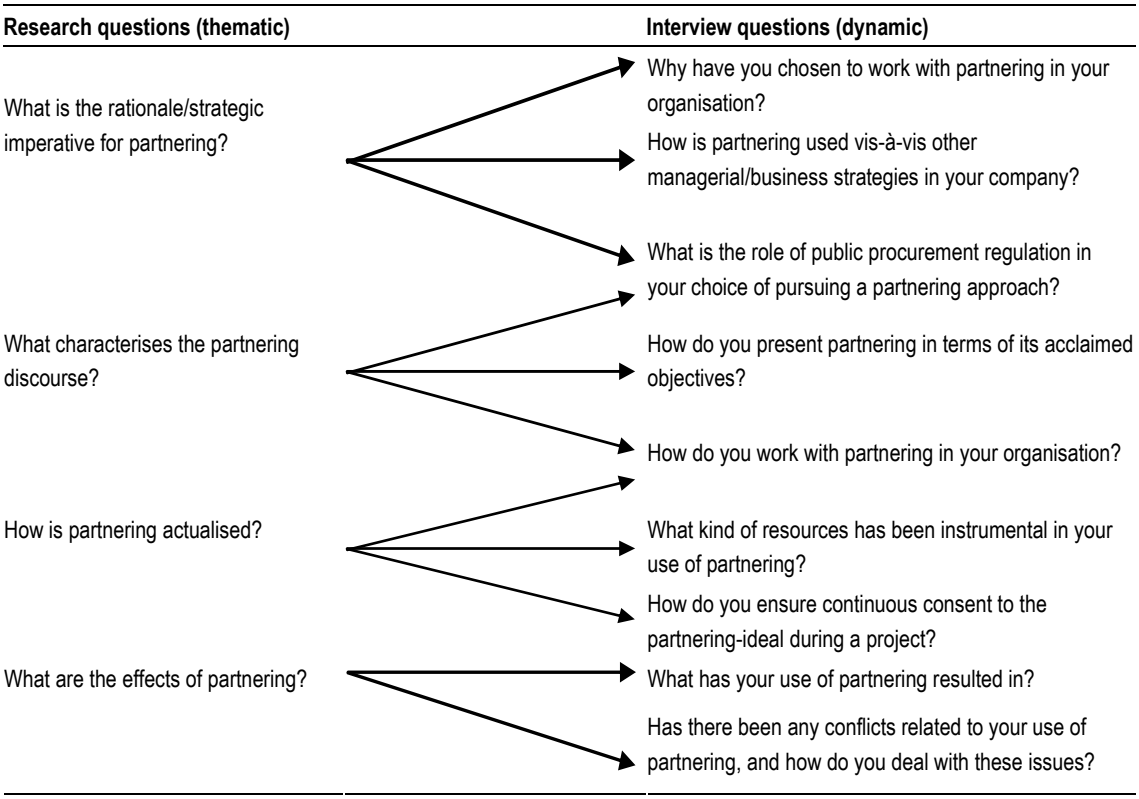


Figure 12. An example of the interview guide and its dual focus on thematic respectively dynamic questions.

Juxtaposing these two facets of the interview Kvale arrives at the conclusion that a good thematic question does not necessarily translate into a correspondingly good dynamic question. As such, it is a good idea to develop two different yet interrelated interview guides; one focussing on the most important thematic research questions and another containing the actual questions, which are put forward during the interview itself, and which furthermore addresses both the thematic and the dynamic dimension. Kvale (1997: 122, adapted to fit the area of my own study) illustrates this as shown above. In my eyes there is however more to this interview design process than method-technical considerations of who to include and what to use the specific interviewees for. There are also methodological considerations relating to what interviews per se can be used for.

In my study I have chosen to use the interview strategically as a method of bridging or triangulating the documentary based first part of the thesis with the ethnographic inspired second part. This use of the interview means that my choice of interviewees *in the first place* has been made on the basis of the documentary study's shortcomings in addressing the actualisations of partnering on the level of analysis implied by Foucault. This means that I have chosen to focus on a few central actors, which have emerged as a result of the documentary analysis. *Secondly*,

I have conducted interviews with relevant actors based identified by means of the field study. The focus of these interviews has been on exploring actualisations of construction policy (and thus also on partnering), rather than trying to reveal some interior or exterior reality. A list of interviews conducted as a part of the study is presented below.

Table 5. Primary interviews conducted.

Person	Theme	Date
External project evaluator	The U2 project – issues, problems, and dilemmas	15.02.08
Government official	Development of the Danish construction sector	15.02.08
Project process consultant	The U2 project – issues, problems, and dilemmas	13.03.08
Union Head of Secretariat	Unions, craftsmen and the new political environment	26.03.08
Head of Section – contractor	Contracting and the new political environment	03.04.08
Consultant/facilitator	BYGLOK, BYGSoL and the Urban Mirror	23.05.08
Consultant/facilitator	BYGLOK, BYGSoL and the Urban Mirror	23.05.08
Project manager - contractor	The U2 project and the Urban Mirror	27.05.08
Group interview. Four craftsmen	Reflexions on the Urban Mirror	20.06.08
Tradesman's assistant	Reflexions on the Urban Mirror	20.06.08
Craftsman	Reflexions on the Urban Mirror	20.06.08

In addition to these formal interviews, continuous and often informal discussions and dialogue have been conducted with project participants in relation to the various meetings I have attended.

Analysing the interviews: a post-structuralist approach

Finally, I want to address the issue of analysing the interview. In an article Alvesson (2003) develops a framework for thinking about the research interview as something more than just a talk between a researcher and a respondent. One of Alvesson's agendas is to problematise dominating *neopositivist* and *romantic* views on the interview being respectively a) an instrument, to be used as effectively as possible in the hands of the more or less capable researcher; and b) a human encounter, encouraging the interviewee to reveal his or her authentic experiences (Alvesson, 2003: 18). Instead Alvesson suggests a total of eight metaphors that offer reconceptualisations of the interview, drawing upon so-called theoretical trends on language, the subject, and discourse. Each of these metaphors involves a key feature of an interview and a central problem or challenge that the interviewee must relate to.

Drawing on Morgan (1980; 1996) Alvesson suggests that metaphors may be used to draw attention to implicit aspects and function as powerful starting points for new ways of seeing. It however seems to be a very complex task for the researcher, if the dominant metaphors for the interview, being either a) an instrument to be used as effectively as possible; or b) a human encounter, encouraging the interviewee to reveal his or her authentic experiences, has to be substituted for a reflexivity in which the researcher has to consider eight levels or spheres of interpretation. Alvesson however suggests a so-called reflexive pragmatist approach to the research interview, entailing:

> *"...conscious and consistent efforts to view the subject matter from different angles and avoid or strongly a priori privilege a single favoured angle and vocabulary" and "…a willingness to postpone some doubt and still use the material for the best possible purpose(s)." (Alvesson, 2003: 25).*

Reflexive pragmatism requires epistemological awareness rather than philosophical rigour and means working with a framework involving a set of potential lines of thinking. Furthermore it does not privilege a particular ontology and does in this sense share some characteristics with postmodernism (Alvesson, 2003: 25-26) and is thus ideally suited to the approach taken in my study. As such, interviews primarily chosen and conducted with a specific purpose in mind, can thus also be used alternatively to investigate other possible theoretical or empirical interpretations. As previously written, in my study I have chosen a dual approach to the use of interviews; however rather than just using some interviews for purposes of triangulation, in which case Alvessons's metaphor of 'local accomplishment' would be appropriate to describe the interview, changing viewpoint to e.g. the metaphor of the 'play of the powers of discourse' would place the interview in a whole new light, potentially revealing other interesting features and analytical themes. Seeing the interview as a 'play of the powers of discourse' focus is shifted from 'what' is said to 'how' and 'why' is said, as something: "…*to be explained and accounted for through the discursive rules and themes that predominate in a particular socio-historical context.*" (Prior, 1997: 70 in Alvesson, 2003: 23). The 'how' does however not refer to the ways in which individuals construct reality, but on how subjectivity is constituted by discourse and accordingly how discourses make themselves present in the interview situation. As such it is the search for and the following of a trope or another metaphor as Marcus (1995) puts it. As such, it follows that adopting this approach

means that it becomes difficult if not impossible to rationalise interview practice – "…*of translating a theoretical understanding into a set of technical rules*" (Alvesson, 2003: 28). Conducting and using interviews in a *post-modern* fashion has some important implications. Alvesson (2003: 28-30) points to the following three implications, which I will describe and discuss in relation to my own study.

First, it is argued that one option would be to maintain conventional interview concerns, and then try to evaluate more carefully the nature of the empirical material using the metaphor framework. Taking this approach it becomes possible to substantiate the case for using the material in order to make statements about the outside world, i.e. outside the actual interview location. This substantiation relies on other measures of trustworthiness than traditional (neo-)positivist understandings. Alvesson thus argues accordingly:

> *"A normal tactic is to emphasize the quantity of the empirical material and the technical rules for coding it. It may give a misleading impression of robustness. Interview reports from several people are not necessarily an indication of high validity; they may indicate that these people engage in similar impression management tactics or are caught in the same discourse." (Alvesson, 2003 28).*

Making a case for validity, or claims for statements pointing to phenomena outside the interview situation, thus becomes a question of demonstrating that a set of accounts triggered by the interviewee by use of different entrances (or metaphors) point in a similar direction (*Ibid.*, 2003: 28).

Secondly, Alvesson proposes another possible implication, being giving the empirical material less emphasis. He thus argues that sometimes interesting research questions and strong theoretical ideas do not fit well with what we are able to study empirically. "*Perhaps we should be more prepared to let data abdicate its privileged position?*" Alvesson (2003: 29) argues, suggesting that careful methodological considerations of what interviews can do, should encourage the use of empirical material for inspirational and illustrative purposes, rather than provide a basis for the determination of truth or meaning.

Finally, a third implication of the reconceptualisation of the interview is illustrated by Alvesson (2003: 29). It consists in seeing interviews as offering a variety of lines of interpretation of interview material. Interviews can be conducted, but the interpretation stays closer to the interview situation, seeing this as a productive site for studying phenomena not that dissimilar from it - i.e. as organizational,

professional, institutional, etc. discourses. Here accounts are seen not as a mirroring of an interior or exterior reality, but as constituting a particular form of subjectivity. This is argued to reduce the gap between the interview situation as an empirical act and the possibility referring to something broader and 'extrainstitutional' (Alvesson, 2003: 29). Taking these implications not as methodological imperatives, but as a 'cautionary prescriptions' I argue that Alvesson's reconceptualisations can be seen as offering a 'mode 2' for interviews in much the same way that Marcus reconceptualises ethnography. Accordingly, I argue that focus thus is shifted from questions of methods and technique to that of theory and analytical strategy.

Part II: A dispositive analysis of Danish construction

4. Exposition

The probably most pervasive problematisation in contemporary writings on the construction sector is that of the *traditional*, either in the form of traditional organisation or the traditional relationships, which is seen as a hindrance towards achieving specific desired goals, e.g. increased innovation, higher productivity, less defects, better quality etc. Not only is this problematisation pervasive; it is sedimented to such an extent that it has become a source of legitimacy so true, that it seemingly is able to cope with rather substantial absurdities and internal contradictions. With reference to Flanagan (1998), Thomassen (2004: 13) notes that it has been suggested that the problems of construction are remarkably stable. Flanagan (1998: 13) argues, in a very short and otherwise undocumented review of 800 years of building history in the UK that two things emerge as striking:

1. That there at no time has been a widespread use of a single or a standard method for procuring buildings; time and again people have tried new ways as a result of their dissatisfaction with previous methods.
2. That problems have changed only a little over time, and that the same problems regularly crop up again.

Taking sides with the construction client, the problems Flanagan *et al.* (1998: 13) are referring to here are to get a clear idea, before construction starts, of what the building will be like, when it will be completed, how much it will cost and whether it will represent good value-for-money. Arguing on the one hand that (client-) problematisations, historically speaking, are more or less universal or unconditional, Flanagan *et al.* on the other hand maintain that the responses employed have differed drastically. In their characterisation of the present state of the construction industry, Flanagan *et al.* (1998: 15) thus write:

> *"Change is constant. Change in the construction industry is influenced by a large number of factors, including interest rates, business uncertainty, government policy, European and world events, training and the changing expectations of customers."*

Nevertheless, in their following sentence, Flanagan *et al.* (1998: 15) argue that:

> *"Everyone agrees the industry must respond to the customer's demands instead of continuing to offer the traditional approach."*

The construction industry is here conceptualised as an inert system, requiring outside forces' (the customer, most notably in the form of the government and public-sector customers) interference in order to gain momentum and break away from traditional approaches. However, if approaches, as seen above, do not refer to the actual responses, then what? And if change is constant, then what is the traditional? Especially, in a partnering context, the notion of the traditional is prominent. The CII-report (CII, 1991) thus suggests that for partnering to work changing traditional relationships is required.

In this second part of the dissertation, I will conduct a critical historical analysis of the sociality of work and organisation in the construction sector. The objective is to understand current practices of construction, especially partnering, by shedding light on differences and similarities between historically distinct periods and systems of governance in Danish construction. In this respect it has to be said that the following analysis does not pretend to reconstruct a social totality but rather seeks to create certain historical events, which we retrospectively observed would say have been shaped according to a specific strategic logic or rationality. This creation of historical events is what Foucault (in Villadsen, 2004) calls *eventialisation* to emphasise that:

> *"…turning something into an event it is a strategic choice of the historian. This is to say that historical events do not exist ready-made simply awaiting historical investigation, rather they are to be seen as products of historical work." (Villadsen, 2004: 2).*

Accordingly, as Villadsen (2002: 28-29) argues it is not possible to investigate all trajectories, breaks, ruptures and struggles. The present second part of the dissertation is as argued previously an instrumental case on dispositives of construction politics and practices, in which:

> *"…conventional historiographic criteria of exhaustiveness are replaced by those of critical intelligibility." (Villadsen, 2002: 29).*

Choices have to be made as to which aspects to problematise and draw on; choices informed by critical intelligibility as opposed to conventional historiographic criteria. Let us observe the difference. Villadsen (2007) tells us that genealogical analysis opposes itself to both:

> *"…the structuralist ambition of fitting contemporaneous elements into a general synchronous model, as well as to meta-historical attempts to unite the diversity of historical events diachronically under laws of historical development, teleological schemes or claims for identity within tradition." (Villadsen, 2007: 310; original emphasis maintained).*

Rather, the emergence of a historical object must be (actively) established by fragmenting it and trace its trajectories into the myriad of elements from which it has been composed. Thus, the analytical task is:

> *"…to describe the historically available elements that made a specific emergence possible and feasible." (Villadsen, 2007: 310).*

In other words, the task in hand is to describe how elements in contemporary and taken-for-granted regimes of practice descend from past practices, institutions, governmental technologies and social practices:

> *"…to describe the theoretical and practical 'spaces' that must have come into existence to make possible the emergence of a particular form of knowledge is our analytical problem." (Ibid., 2007: 311).*

As this is the analytical problem, we can easily see that the order of the analysis is retrospective; that we constantly have to refer to *strata* (Deleuze, 2006); the *historical a priori*, i.e. the historical formations in order to understand the conditions of possibility for the formulation of certain problems. Deconstructed (analysed) historically retrospectively and reconstructed (written) historically forward-going, the genealogy will contain certain 'holes', which are conditioned by the genealogical breaks being established between the different dispositives for which we can claim there exists a certain structural hegemony.

In this thesis, I present three dispositives of construction. The traditional guild system and the 19th and 20th century's building political sphere focussing especially on the formation of a 'Construction Sector' linked to the so-called productivity drive of the 1940s. From here various actualisations of the problematisations of the sector is discussed as they appear in the 1940s, 1950s and 1960s in the form of strict technical-rationalist solutions operating on a principle of stratification. Then, I shift my focus to the 'collaborative turn' of the 1990s, where I discuss the emergence of a new rationality of negotiated practices by looking at the formation of the field of partnering.

Other historical events might have been created; and other dispositives been constructed. I could e.g. have focussed on describing what is often referred to as the first wave of industrialisation in Danish construction. Here the introduction of reinforced concrete played a prominent part in the formation of large contracting companies as well as in the establishment of a basic education for civil engineers (*cf.* Nørregaard, 1942; Andersen, 2007). The reason for my particular focus, and thus delimitation of the historical study, should be found in two conditions. The emphasis on discontinuities, respectively the continuous mirroring of the historical in the object of the study; i.e. how can 'this and that' historical element, event, etc. help us understand something about partnering today. In this respect, I have chosen to work with three basic dispositives that each gives a distinct, systematised view on building practices, the sociality of construction and the managerial responses employed to deal with this complex. I call these: a) building customs and practice, b) rationalisation, and c) negotiation (partnering).

The three dispositives have been constructed with a strong view to Foucault's dispositive modalities discussed in chapter 2. I would like to take this opportunity to reiterate a central concern in relation to the use of this framework. We should not see the following analysis as promoting an understanding of development as a straight-forward linear phenomenon. Thus, I am not suggesting that a dispositive of negotiation has replaced or eradicated a dispositive of rationalisation, which in turn has replaced the dispositive of building customs. Rather, we should retrospectively observed understand our current sociality as located within a triangular space of action (*cf.* Elden, 2007).

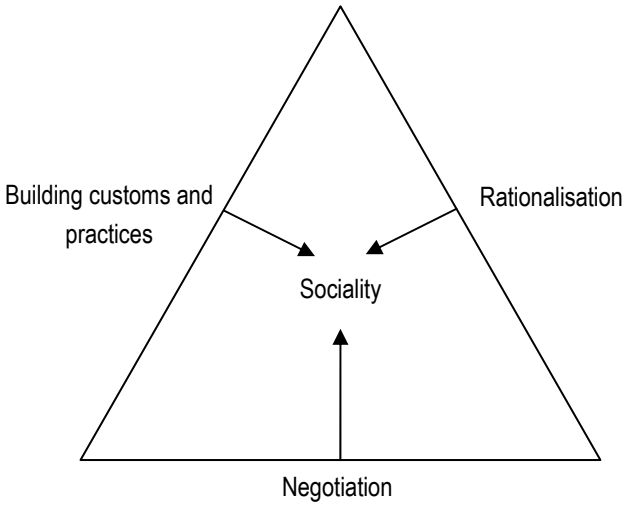


Figure 13. Sociality as a triangular space of action

The following analysis will consider each of these in turn. First, I will discuss the dispositive of *building customs and practices*, which will provide the basis for the following analyses. Then *rationalisation* is discussed with special emphasis on describing how this dispositive re-strategises existing relations. Finally, I will discuss how partnering, speaking from a point of strategic codification, can be understood as a response to the dispositive of rationalisation. In part three, I then examine the interaction and impact of the three dispositives in a specific social setting.

Before we commence with the historical analysis, I will briefly clarify the term 'building practices', which I have used in the title of this second part of my dissertation. With Foucault (1991: 75), practice is here used in the sense of "…*places where what is said and what is done, rules imposed and reasons given, the planned and the taken-for-granted meet and interconnect*" and the analysis of the three distinct 'regimes' or dispositives of building practices below is thus an analysis of programs of conduct having both prescriptive and codifying effects (Foucault, 1991: 75).

5. Coherence and the practice of building

Interestingly, very little has been written on this the traditional sociality or modus operandi of the construction sector and the different activities carried out as a part of the procurement and construction phases.

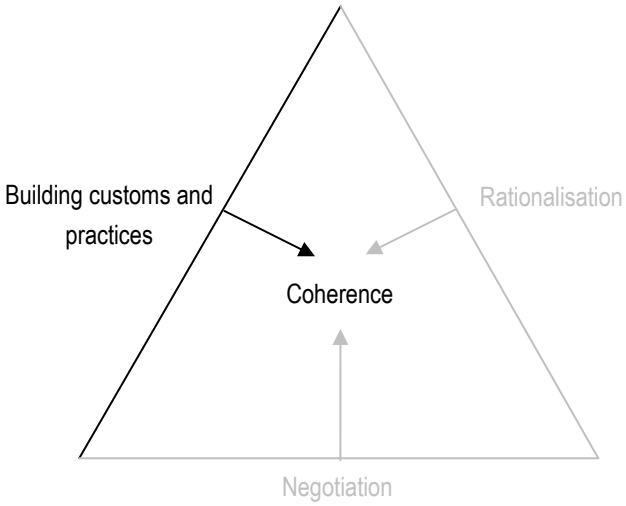


Figure 14. The analytical focus of the chapter.

The present chapter therefore constitutes an attempt to open the discursive field and examine the early history of the sociality of work and organisation in the construction industry as a backdrop for the following analyses of the politics and sociality of partnering in remaing second part of this dissertation. In doing so, I will use the conceptual figure of 'good building custom and practice' (da. *god byggeskik*) as the *diagrammatical* point-of-entry.

5.1 Building customs and practices

A central concept in Foucault's dispositional analysis is thus that of the diagram, being in the words of Deleuze (2006: 29-36) an inter-social and constantly evolving display of the relations between forces, which constitute power in different social fields and function to produce a new kind of reality; an ideal model of sociality.

Every social field has its dispositive and diagram as an ideal figure of political technology; as:

> *"…the presentation of the relations of between forces unique to a particular formation; it is the distribution of power to affect and the power to be affected; it is the mixing of non-formalized pure functions and unformed pure matter." (Deleuze, 2006: 61).*

As such is the concept of building customs and practice examined in the present chapter. The reason for this point-of-entry is that the notion of 'good building custom and practice' emerges as an interesting, and extremely conserving, social and technical mechanism, when discussing building and construction from a historical perspective. Building custom and practice is an elusive concept used somewhat differently in various contexts, referring at times to architecture (due to the Danish architectural movement *Better Building Customs*[4]) and at other times to a heterogeneous collection of elements such as technical solutions, materials, rules, and norms. When referring to the latter, the notion as regards to content seems to have developed only little, and is today still rooted in a traditional feudal understanding of the production process as well as of the role and conduct of the craftsman. I will return to this in a little while, and for now take a small excursus over a contemporary usage of this notion of 'good building custom and practice.'

The Danish Building Defects Fund (www.bsf.dk) thus argues that the first paragraph in the Building Law is an expression of the term good building custom and practice, as it stipulates that the law e.g. aims at:

– Ensuring that buildings are constructed in such a manner that they present satisfactory security corresponding to fire, safety, and health related issues.
– Furthering productivity enhancing precautions.
– Furthering precautions, which can counteract unnecessary use of resources and feedstock in buildings.

According to BSF, good building practice encompasses both rules and customs. As for the first, a clarification of the provisions in the building law can be found in the so-called *common technical joint property*, which is made up of rules, norms, guides, written communications, building technical experiences, specific court decisions, etc. More interestingly, good building practice is also described as a set of unwritten

[4] Better Building Customs (da.: *Bedre Byggeskik*) was a Danish movement established in 1915 by a group of architects with the objective of improving the Danish building culture through simple houses of good technical solutions completed by master artisans. The organisation formally closed in 1965.

customs of conduct, which are commonly recognised and are created and developed between the different actors of the construction process. Good building practice is said to be founded on long-term experiences and often on the best technical traditions. As such, good building practices do not rely exclusively on formal experiments; rather they have proven their own worth in the course of a sufficiently long practical documentation process:

> *"Coincidences do not reign and through the construction process, via practice, the building practice has been adapted to the specific building work and the expected influences in a given situation." (www.bsf.dk; own translation).*

But what then, does these unwritten customs of conducts, best technical solutions, and long-term experiences consist of? In order to answer this question, I suggest that we turn our attention towards three interrelated topics: guilds, apprenticeship, and the organisation of work.

Guilds in medieval construction

The main entry point here is that the organisation of work as we know it today, to some extend is a prolongation of what could be called a feudal production system in which the physical input products or materials play a decisive role in the organisation of the system.

Burkal and Jensen (1978) argue that up until the 11th century, wood was broadly speaking the only feedstock to be used as building material in Denmark, primarily due to quantity and accessibility. Even large building structures such as churches were made entirely from wood. The first building trade group was constituted by the carpenters who conducted most of, if not all the work related to the wooden buildings. According to Burkal and Jensen (1978:87) the formation of the carpentry trade marked the rise of the first division of labour in the building process. Previously, the future residents of the buildings had conducted all work themselves; however with the carpenters the notion of the construction client also emerged. The client stipulated the form and function of the building, whilst the craftsmen were responsible for the actual execution of work. The second division of labour occurred in the 15th or 16th century, as joinery and carpentry was separated into two distinct trades. Carpenters now had the responsibility for the 'crude' parts of the woodwork, i.e. the load-bearing constructions, whereas the joiners performed the more detailed woodwork focussing specifically on windows, doors, and finishings.

A further division of labour occurred somewhat in parallel as brick buildings became more and more popular. In the 12th century, granite and limestone gained prominence in church buildings, and soon after bricks made from hard-burnt clay was introduced to Denmark by Italian craftsmen. This marked a turning point, as bricks soon became the most used material for churches and public buildings, whilst wood maintained its status as preferred material for private residential buildings.

Although, bricks gained prominence in the following centuries it was not until the 14th or 15th that the first stationary clay brick manufacturing plant were established. Previously clay bricks had been manufactured at the various onsite locations; however as bricks in the 17th century substituted wood also in residential buildings, this soon changed, and masonry evolved as the biggest trade group in Danish construction.

With the introduction of brick buildings, the building process became more complex, as there now were several distinct trade groups working more or less simultaneously on-site. This horizontal disintegration (into trades) was according to Burkal and Jensen (*Ibid.*) followed by a vertical breakdown as well with the introduction of master builders; experienced master artisans managing an architect's function in laying down principles for the design of the buildings as well as instructions for the actual work process. A form of organisation often referred to as the master builder organisation (da. *bygmesterorganisering*), which is not unlike the individual trade contract organisation of today; however with differences as will be discussed later. This represented a substantial change in the traditional patterns of socialisation and organisation among the craftsmen. Where the first building craftsmen were traditionally independent and self-employed, travelling from farm to farm, or city to city, selling their skills, from the 13th and 14th century onwards a new institution however emerged, which had great influence on forming the work organisation and the notion of building customs and practice: the guilds.

In fact Turnbull (1993: 318, 329-330) argues it was the 'cathedral crusade' of the 13th century, which initiated or accelerated the organisational and institutional transformation, as there along with the cathedral:

> *"…came not only the emergence of the role of the master mason, the master carpenter, the glazier, and the sculptor but also the lodge or guild and the itinerant tradesman who took the whole of Europe as his workshop." (Turnbull, 1993: 329).*

The lodge was thus originally a temporary building on the building site used to shelter masons as they carved stones. However, it eventually became the institution whereby:

> *"…knowledge and skills were transmitted through apprenticeship, mutual exchange, and accumulation as manifested, for example, in the logdebooks." (Turnbull, 1993: 329).*

The function of the craft guilds

The guilds as an institution represented a form of organised community. They were formal associations of specialised artisans (masters), whose authority was backed by superior political sanction (Epstein, 1998: 685). The Danish word for guild, *lav* or *laug*, thus comes from the Old Danish word *lagh* meaning community – a word which also *law* derives from. According to Raffnsøe (2003: 11) lagh (as *law*) was originally in the plural and signified the already defined and established issues; that which has been laid down in the right way.

A cornerstone in the guild system was the so-called guild statutes, da. *lavsartikler*, which represent the earliest form of (state-)centralised regulations in Danish construction. The guild statutes can be said to comprise a *constitution of the sociality of craftsmen*, i.e. guidelines for the conduct, norms, and practices of belonging to a community and being a craftsman. The statutes played a very important role, as they regulated both the workmanship, the formal festivities, and the social intercourse. According to Yeomans (2003) much traditional building is thus carried out in absence of any formal methods of quality control. And in the absence of formalities there must be something else that ensures sound building – methods that are internal to the craft system itself, being:

– Control of entry to the trade.
– Sanctions for poor work.
– A recognised training system.

Entry to trade was a prominent mechanism in the traditional feudal or city state society. In cities it was only possible to work as craftsman if you were a journeyman employed at a master artisan or a master artisan yourself. The master artisan had to be a member of a guild, which in turn required him to be part of the bourgeoisie and carry a trade license. The guild was a professional community, which in most Marxist-inspired analyses had a primary protectionist role to play in ensuring that only members of the guild could perform their trade in the cities. This entry control

was vigorously enforced with severe precautions in case of violations. In the 1741-statutes from the guild of coppersmiths in Copenhagen it e.g. reads in the first paragraph that:

> *"No one must make a living as a coppersmith, or hire journeymen or apprentices, without having won his citizenship, having made his master work, and having been given his trade licence. Does any violate these rules; a fine of 4 Rdlr. must be paid to the guild for the first offence, the double for the second offence, and corporal punishment the third time." (Guild of Coppersmiths, 1741: §1).*

Upon admission into the guild, the master artisan accepted to serve the king, the city and the guild according to the commands of the guild master. At the same time he however also accepted, as far as I have been able to trace it, the first competition provisions of the trade. Despite their seemingly monopolistic position, the guilds (and also the magistrate and the city council) kept strict control with both the price and the quality of work. In paragraph 4 in the coppersmiths' guild statutes it is thus stated that if the master artisan is found to be *un-cheap* or *negligent*, he has to pay a penalty to the guild as well as to the poor (*cf.* Kieser, 1989: 553). Yeomans (2003: 3) gives an example from Britain in which the guilds were under an obligation to seek out and destroy any materials or work that was defective. He argues that this quality control function, which originally was carried out in exchange for having entry to the craft restricted, eventually broke down making it necessary for clients to control their own people to supervise work on their own buildings. This is to some extent also the case in Denmark; however it is also worth noting that the fixed schedule of wages, i.e. the price lists composed by the guilds (and today by the different trade organisations) constituting the most central element of the piece rate system, still contains the clause that the stipulated prices only apply to *well-performed work* and that the craftsmen bear full responsibility and risk being sanctioned in the form of deductions in their piece rate if they deliver inferior work, which has to be redone.

In general, Epstein (1998: 685-686) argues against the prevailing economic explanations of the craft guilds, i.e. that they:

– Acted as cartels, both as buyers of raw materials and as sellers of their products.
– Provided members with inter-temporal income in highly unstable markets thus smoothing the trade cycle.
– Served as bargaining units in narrow markets in which agents held market power.

– Operated as political and administrative units, which protected their members from expropriation by the urban elites.
– Were rent-seeking[5] organisations, which lobbied for economic privilege from the state.

Especially, the latter explanation that guilds acted as monopolists in political market is dismantled by Epstein (1998:686-687), arguing that guild privileges were contingent upon competing political interests and that the comparative advantage of guilds *vis-à-vis* other institutional arrangements and organisational forms is not immediately apparent.

> *"Although it would be wrong to deny that craft guilds took on these capacities [protecting members against capital expropriation], quality enforcement, credit provision, and welfare support seem insufficient reasons for the guilds to emerge and to survive for such an extraordinary length of time." (Epstein, 1998: 687).*

This view is also supported by Seligman (1887: 55) who argues that:

> *"…there is no proof of any political oppression of the craftsmen by the guild-merchant, nor was there any general conflict between patrician burgesses and plebeian artisans, resulting in a complete victory of the crafts, and giving them an independent jurisdiction."*

Then what was the function of the craft guild and its apparent durability over the course of so many centuries? Epstein (1998: 687-688) suggests that the main purpose of the craft guild was to share out the unattributed costs and benefits of training among its members. Control of entry to the trade seems therefore apparently more related to the existence of a recognised training system, which in its earliest forms was outside the sphere of state-regulatory intervention, than to strictly protectionist matters.

In Seligman (1887: 64-67, 71) we find a similar line of reasoning. He suggests that the control of entry was the condition *sine qua non* of exercising any supervision over craftsmen for the purposes of avoiding any mischievous practice as well as to prevent fraud and public deception. This view is further supported and substantiated by Kieser (1989: 549-552) who argues that guilds were initiated by offices created by the town magistracies for two reasons: 1) to ascertain that the

[5] I.e. seeking to make money by manipulating the economic and/or legal environment rather than by trade and production of wealth.

taxes were paid to the town and church, and 2) to protect the poor from any exploitation and manipulation by the craftsmen and merchants.

Apprenticeship and the economy of skills

Remember Foucault's question in *AK* pertaining to the rules of formation of strategies: of all the possible architectures that might have emerged, and of all the responses that could have been materialised, how come this particular choice was made, and who are the specific authorities that guided this choice? In Epstein's (1998) reading skills emerge as the economy of the discursive formation of the guilds, and both the horizontal relationships between masters in the guilds, as well as the vertical relationships between the master and the apprentice, designate the rules and processes of appropriation.

Epstein (1998: 688) criticises Adam Smith's attack on apprenticing law as a means of restricting access to the labour market, as this has lead to that the economics of pre-industrial apprenticeship has been virtually ignored. According to Epstein, Smith's argument is that apprenticeship served to maintain a labour market monopsony[6] because of the long formal length of training that was imposed. In the 18th century in Britain this was for many crafts seven years (Epstein, 1998: 688), while it in Denmark seems to be a few years shorter. The statutes of the guild of coppersmiths (1741, §6, 9) thus stipulate that a boy venturing into apprenticeship at a master artisan has to go through a three month trial period, followed by four or five years of apprenticeship before rising to the levels of journeyman. A further years training, formal examination (the master piece), payment, and citizenship are then required to become master artisan.

Epstein argues that Smith's argument has as epistemological and an institutional component. The first is that tacit, embodied skills, which cannot be formulated explicitly or symbolically through the written or the spoken word, nonetheless can be transmitted at virtually no cost. For Smith, all skills are general, which however for Epstein (1998: 688) underestimates the existence and complexity of specific skills in preindustrial crafts and the difficulties in transmitting expertise. Continuing, Epstein argues that the question to be addressed is not the cost or necessity of training, but:

[6] A market with only one buyer.

> *"…which institution could best overcome the three principal hurdles of technical transmission…how to teach skills; how to allocate costs to provide teachers and pupils with adequate incentives; and how to monitor the labor market to avoid major imbalances between supply and demand for skilled labor." (Epstein, 1998: 688).*

A system of training contracts enforced by specialised craft associations, the guilds, was arguably the best solution (Epstein, 1998: 688).

As for Smith's institutional critique of apprenticeship, Epstein (1998: 688-689) writes that that it raises the objection that informal rules of apprenticeship also applied where craft guilds were not legally sanctioned, thus not *per se* leading into labour market monopsonism. Epstein substantiates this claim by noting that governments lifted the guilds' entry requirements if epidemics or other events either reduced the supply of or increased the demand for craftsmen.

Speaking from a general viewpoint, Epstein (1998: 690) argues that urban labour markets were far more flexible than the letter of the law seemed to allow, and that guild coercion instead was essential as a means of enforcing apprentice rules in the presence of training externalities in transferrable skills. Artisans required skilled labour to produce goods to a standard quality and to raise output and before the introduction of mass schooling (*cf.* Foucault, 1991)[7] a certain degree of formal training was needed:

> *"…to iron out initial differences in skills among children and to socialize adolescents into adulthood." (Epstein, 1998: 690; my emphasis).*

Apprenticeship and education

Starting with a contemporary discussion of apprenticeship, the Danish Ministry of Education in Christensen (2000) describes apprenticeship as follows in their analysis of the reform of the traditional vocational education system; a reform "…*best understood as a dynamic response to societal and technological changes […] away from mass production of standard goods […] towards more individualised options.*" (Christensen, 2000: 16; original emphasis):

> *"One can observe apprenticeship as a social 'arrangement' in which the central element is that a pupil on the basis of an agreement (contract) with an 'artisan', a company, completes a regulated education, which through a finalising practical examination gives the now educated*

[7] Following Foucault (1991) mass schooling can be seen as a result of the emergence of a discipline and surveillance dispositive, which according to Raffnsøe (2006: 31) also brought about the transition from the organisation of crafts and trades in guilds to an industrial form of production.

> *pupil/journeyman admission to a profession. In the past couple of centuries this has taken the form of work-linked training, where the original guild statutes are replaced by legislation and public regulation." (Christensen, 2000: 32; original emphasises maintained).*

In addition to being a social arrangement, apprenticeship is also seen as a pedagogical arrangement described as a process of penetrating the trade by participating in the activities of the trade, by means of traditional or customary norms and partly handed down, partly intuitive methods. The core of education through apprenticeship according to Christensen (2000: 33) can be illustrated as a spiral implying an increasing engagement providing the pupil with the learning opportunities inherent in the participation in the activity of the community of practice.

Yeomans (2003) describes the learning process of the medieval apprentice as reliant on two conditions: 1) being under the direction/supervision of a master, and 2) being engaged in actual building work. However, while craft skills also can be taught in formal training programmes away from the work itself, Yeomans sees the on-the-job-learning as more advantageous as skills are imparted over a long period of time enabling the apprentice to see the building techniques used in a variety of situations and how basic forms are adapted to suit different situations, thus turning learning into a question of being able to make judgments about when and how to make variations. Yeomans (2003: 2) furthermore argues that the apprentice will also learn the limits of the methods used, and as a result hereof (speaking from a technical and structural viewpoint) building practice and custom represents an inherent conservative approach, and builders trained in this way will be hesitant to make too many variants upon the standard methods; an argument, which is further substantiated later in this chapter.

Two things have been briefly touched upon in the above. First, that learning is related to practice, and secondly that apprenticeship (seen as *learning*) seems to differ from formal school education (conceptualised as *teaching*) in several ways. These two elements are treated inter-related in the following.

Borrowing from Foucault's terminology, I suggest that the differences (discussed below) can be laid out as shifts in dispositive modalities from law to discipline (and beyond). This is a shift, which will be further discussed elsewhere in this part of the dissertation; however for now I will come with the following observations based on Christensen's (2000) analysis. Using the metaphor of landscape, Christensen (2000: 16-25) suggest that apprenticeship can be seen as an open learning landscape as

opposed to the closed learning landscape provided by the modern school. However, rather than seeing the modern school as just spatially closed, it is also exhibits additional *disciplinary* characteristics, which as will be discussed later also permeate the modern Danish construction sector, namely spatio-temporal stratification and correspondence (Foucault, 1972/2006; Clegg *et al.*, 2002; Jensen, 2005a; 2007), meaning that individuals are divided in space (e.g. classroom places), that time is divided in elements (e.g. timetables), that learning is divided in processes (e.g. classes), that conduct and performance is hierarchised into more or less acceptable (e.g. grades). Jensen (2007) argues that discipline plans the totality from the parts by managing the parts and predisposing their actions. In modern schooling Christensen (2000: 18) thus argues that common goals determine an upper as well as lower limit for what has to be learned "…*and through sequentiation […] also the basic pace and sequence of learning is determined.*" In contrast, apprenticeship is described by Christensen as an almost tentative process in which the pupil, within certain rules of the game (at Christensen conceptualised as *packages of objectives*, representing recognised professions), can choose his or her own course through the apprenticeship. Most central in the voyage through the learning landscape is in Christensen's words that the pupil reflects on his or her own experiences gained from participation in various forms of communities of practice.

Apprenticeship and the dimension of innovation

A much discussed topic in economics and institutional theory is whether or not crafts and guilds suppressed or promoted innovation. The hitherto dominant understanding is that guilds suppressed innovation (Kieser, 1989: 553) and that if innovation did occur within different crafts it is because: "…*most of these innovations did not originate from the guilds' workshops*" rather from monasteries who possessed an innovative advantage as: "…*only the most educated men were admitted as monks; thus they had the qualifications to rediscover the science and technologies of the antiques and to build upon them. Since monastic innovations were by definition holy works, the traditional world view did not apply to them.*" (Kieser, 1989: 554).

Epstein (1998: 706) suggests that institutionalised apprenticeship, in addition to its social function of creating responsible subjects (as craftsmen as well as citizens), also provided a technological edge that underpinned the craft guilds' long-term survival. The institution of the guilds in other words also provided the basis for technological change and innovation, which otherwise often is neglected or

dismissed in contemporary analyses of the 'pre-modern' building and construction sector, in which increased specialisation and industrial 'likeness' are seen as only (economically) rational responses to the 'innovation' and 'productivity' problems.

Even though Yeomans (2003), as seen previously, suggests that apprenticeship leads to only few variations over standard methods, it is important to notice that he is speaking from the point of the individual master and his apprentices. Epstein (1998: 694) thus states that competing processes and techniques between masters were frequent and that the standard oath sworn by an early modern London apprentice stipulated that he would keep his master's secrets – an obligation that also Seligman (1887: 87-88) confirms and expands by adding that the master in turn is obliged to teach the apprentice the craft without any concealment.

Epstein (1998) in contrast to Kieser (1989) does not want to insert an *innovateur* (in the sense of a *Foucauldian* author or *man*) as the locus and genesis of innovations in medieval Europe. Rather he says that craft innovation was the outcome of small-scale and incremental practical experiment, and that craft guilds, in addition to providing inventors with monopoly rents, increased the supply of technology systematically by establishing a favourable environment for technical change as well as promoting technical specialisation through training and technical recombination through artisan and journeymen mobility (Epstein, 1998: 699, 701-702).

In Epstein's version innovation was an (at first) unintended consequence of the apprenticeship system. Apart from the 'anonymous improvements' that might take place within guilds and crafts through the process of mentoring and learning, Epstein argues that the apprenticeship system gave rise to organisational and technological externalities due to the process of *clustering*, which took place as master artisans located their shops in the same area in order to monitor apprenticeship rules effectively.

Furthermore technological transfer is believed to have taken place through the permanent migration of artisan as well as through the temporary migration of journeymen, both of which are seen as functional consequences of the guild system. However, where the first according to Epstein (1998: 702) can be seen as analogous to the breakaway of small firms from larger firms under industrial capitalism, and was sought restricted by the guilds, the second can be seem as an *obligatory passage point* (Callon, 1986) that any apprentice or journeyman had to pass through in order to rise to master artisan. Although artisan migration to some extend was sought restricted by the guilds, it is at this point relevant to take notice of the particulars of

guild regulation in relation to the wider societal regulation. Seligman (1887: 76) thus states that guild laws were part and parcel of the common law and not independent work of the crafts themselves, and that this was as true of the system of apprenticeship as of the other provisions of the guilds. Seligman (1887: 80) describes guilds as: "…*to a certain extent organs of the city government, but entirely subordinated to it.*" Thus, although guilds might have sought to restrict artisan migration, in times of need – such as during the great fires of Copenhagen in 1728 and 1795 – the king or the city council would import craftsmen from other provinces and abroad in order to produce the required output. As an example, Burkal and Jensen (1978: 91) notes that in Copenhagen in 1730 1/3 of all carpenter journeymen were German. As for the ratio of foreign born masters compared to Danish masters, no sources have been found to describe this; however we do know that several foreign master artisans and their families migrated to Denmark in the 17th and 18th centuries and that these could and indeed did become members of the bourgeoisie. Foreign artisans were furthermore exempted from documenting their qualification through conducting a masterpiece (Nørregaard, 1943/1977: 44).

The management and organisation of work

> *"To manage, that is to lead, stipulate guidelines, divide tasks and coordinate efforts, entails exerting authority and legitimate power. It involves establishing certain relations between actors that ascribe to the right and possibility to define certain ways of acting as desirable or appropriate. Based on this conception, authority does not originate from the person exerting it, but from those over which it is exerted." (Hull Kristensen and Kjær, 2002: 4).*

The above quote is taken from Hull Kristensen and Kjær (2002: 4) who, with reference to the American organisational theorist Chester Barnard, insist that the power of a principal is facilitated and limited by the ideas and rules of legitimate power or authority that apply to a particular field of management. As exemplified in the above examination of the craft/guild system, and in accordance with Hull Kristensen and Kjær's (2000: 8) observations, the predominant understanding of the traditional Danish system of authority as a *patriarchal* or *paternalistic* complex, which eventually was broken by the industrialised management principles, does not provide a satisfactory image of the actual circumstances surrounding the forms of management and authority in the craft-system.

Although the master artisan was positioned in a very central position in the craft/guild system there are a number of reasons for not viewing the paternalistic

authority system as particularly dominant in pre-industrial Danish society. Hull Kristen and Kjær (2000: 8-9) point to the following:

– The concept of *patria potèstas* (see below) of Roman Law had little influence in the Danish society.
– The artisans were closely tied to the guild, who exerted strong regulation over the masters.
– Journeymen as well as master artisans worked together to re-establish the guild community after the introduction of freedom of trade (in 1857) and the abolition by law of the guild system.

In Roman Law the family was the basic unity in society and the concept of *patria potèstas* (paternal power) gave the *pater* the legal capacity or power of life and death over all members of the house (the extended 'family'). The *pater* thus had an absolute power over his extended family in a way that master artisans of pre-industrial Denmark did not exert. The reasons for this were both that Roman Law as mentioned above had only little influence in Danish society, but also that the artisans, both as masters and journeymen, were closely tied to the guilds. They thus became members of the guild community through ceremonies and by travelling around Europe in order to learn the secrets of the trade, as previously discussed. Hull Kristensen and Kjær (2000: 8-9) argue that the guilds effectively regulated the role of patriarchs that master artisans could play in their own households through institutionalising rights and obligations for masters, journeymen and apprentices alike. Master artisans were just as much subjected to the rules and authority of the guilds as were the journeymen and apprentices.

Later, with the introduction of the freedom of trade in 1857, this firmly institutionalised system of authority however was challenged drastically. The guilds finally lost their established legal rights and authority to the state (or city governments). This however did not mark the end of the guild community as such, as masters and journeymen worked to re-establish the traditional communities in the shape of associations. According to Hull Kristensen and Kjær, most historians agree with Nørregaard (1943/1977) that the rapid success of employers' and employees' unions and associations can be attributed to the attempts by craftsmen to re-establish themselves under the new legal conditions. Nørregaard (1943/1977: 61-83, 356-391) notes that especially the building crafts pioneered this movement, with organised labourer making up almost 100 pct. of the total workforce in 1885.

An unintended effect of these struggles to re-establish the guild system was according to Hull Kristensen and Kjær (2000: 9) the establishment of an elaborate educational system consisting of local schools and national vocational schools with responsibility for testing and setting standards for skills. This meant that the trade evolved into an institutionalised labour market, in which the state replaced the guild as regulator of the masters' possibilities for exercising paternalistic forms of management.

Organisation of work and the site as laboratory

As previously stated, not many accounts of the actual execution and organisation of work in medieval building exists, a reason for this being that literate culture was confined to particular social classes, to which artisans traditionally did not belong. Tillotson and Tillotson (2005) therefore argue that those who speculate on the organisation of medieval building and craftsmanship must rely on close examinations of the works themselves, the writings of scholars on theoretical matters, and such mundane documents as building accounts. Needless to say, these sources often (exclusively) deal with what could be called 'canonical' buildings (churches, cathedrals, and the like), which played prominent parts in medieval society. One could only speculate whether these accounts therefore are representative of any 'general' building practice. Nevertheless, and in the lack of alternatives, I will make use of these different types of sources below.

The construction of Gothic cathedrals, such as the *Cathédrale Notre-Dame de Chartres*, poses according to Turnbull (1993: 315) a number of questions: how were large numbers of undifferentiated stones assembled into an organised structure? How were labour and skills of large number of men and women coordinated? What was the role of the architect, of drawings, and of scientific knowledge? The answer is, he argues, from the ad hoc accumulation of the work of many men, which cannot be explained solely from a technical perspective, but rather has to be seen the assembly of a coherent whole from the messy heterogeneous practice of diverse groups of workers.

Accordingly, in the 30-year period of construction at least nine different contractors or master masons were employed to build the cathedral in 29 distinct campaigns. The cathedral was subjected to 13 major design and structural changes, yet there was no overall designer, just a succession of builders (Turnbull, 1993: 318-319). Under these circumstances, how could this feat be accomplished without any

theoretical or scientific knowledge of structural analysis, without any specified designs or plans, and without resorting to mysticism? According to Turnbull (1993: 322) the answer involves seeing cathedrals as experimental laboratories in which three key elements (templates, geometry and skills) are immanent to the craft/guild system and the economy of skills reviewed above.

Using the analogy of 'laboratory' Turnbull (1993: 321-324) seeks to address three facets of pre-modern construction, embodied in the building of cathedrals:

1. That the very construction of cathedrals constituted a series of full-scale experiments – and that the laboratory (and thus the practice or customs of building) is constituted *through* the performance of experiments rather than designed, and thus
2. that laboratories are spaces in which the local, tacit, and messy knowledge and practices of groups of practitioners are transformed through collective work into a coherent body, and finally;
3. that these laboratories are powerful loci of social transformation, in that they through a process of heterogeneous engineering interrelated machinery, instruments, skills, techniques, theory, raw materials, and social relations.

In this heterogeneous ensemble of sociality, Turnbull points to three elements in particular as important in his reconstruction of the medieval practice of building, being the use of templates as opposed to plans, a practical rather than theoretical understanding of geometry, and a mimetic, rather than an abstract, acquisition and transfer of skills. On the use of templates Turnbull writes:

> *"All analysts agree that there are no extant plans for Chartres and the architect is unknown, but it is anachronistic to assume, as some historians do, that they <u>had</u> to exist." (Turnbull, 1993: 319; original emphasis).*

Today drawings (whether 'traditional' 2D representations of plan, elevation, or sectional views or 3D representations of building objects) are seen as imperative in instructing people how to cut and assemble different materials. Representations of the future work to be completed are thus key elements in the sociality of the project (*cf.* Thuesen, 2007). However, in the apparent absence of plans in medieval building, Turnbull (1993: 321-322) suggests that templates, being patterns or moulds used by masons to cut stones in particular shapes, constituted the organising principle of building work, as they at one and the same time permitted both the accurate cutting

and replication of shaped stone and the transmission of knowledge between workers. Templates, instead of plans and drawings, furthermore possess an obvious advantage that fit the discontinuous character of the cathedral-building process: they do not *dispose* future action and performance. According to James (e.g. 1989) the building of churches and cathedrals in the Paris basin tended to be conducted in short campaigns due to certain technical as well as financial circumstances. The mortar used was slow-drying and the stonework had to have substantial time to settle before work on other parts of the structures could be continued. Furthermore Turnbull (1989: 320) argues that the cycle of fund-raising through donation and tithing reinforced the discontinuity of the process. Work on the cathedral lasted 30 years in which the contractors and their crew came and went in irregular sequences (Shelby, 1981: 173), as work on site was dependant on the financing.

As work on site was dictated by the cycle of financing, the client had to settle with whatever crew was available at the time work; however, as each crew as a result of both the guild system and the general absence of a common measurement system, had their own construction techniques and methods, the exact design of the different 'work packages' or parts of the building would necessarily differ, as a consequence of which a complete *ex ante* design and planning of the buildings would be futile. Rather than using plans and design drawings, it can thus be argued that templates, representing the materialisation of a practical knowledge of geometry Turnbull (1993: 328), were used to ensure *coherence*. Accordingly, coherence rather than *correspondence*, which is the promise of the plan, emerges as the governing principle of pre-modern building practice.

As seen, geometry is also placed in a prominent position in this early building practice. Rather than the general stratification of space into abstract universal measurements, ratios seem to represent the kind of structural knowledge, which was passed on in the apprentice system. Turnbull (1993: 323) exemplifies this by pointing to something as mundane as the proportions of hardwood joists:

> *"…half the number of feet in a span expressed in inches plus one inch will give the depth of a hardwood joist. These rules of thumb were stated as, and learned as, ratios; for, as the span gets larger, the depth of the joist will too."*

Another example, still in use today, relates to stairs where the rule of thumb dictates that twice the riser plus the tread equals two feet. Turnbull argues that this sort of geometry is extremely powerful, as it enables the transmission of structural

experience and makes possible the successful replication of specific arrangements in different places and under different circumstances. As such it reduces complexity and allows for a flexible rather than rigidly rule-bound response to differing problems. It was this local-situational participatory reflexiveness that apprentices had to learn in the course of their training.

In the 1951-report from the Danish Institution of Civil Engineers' rationalisation committee (Dansk Ingeniørforening, 1951: 28-32), the committee's stair-suggestion consists of standardising the stair dimensions accordingly: each riser should measure 175 mm in height and each ground 250 mm, with 16 risers per floor for a total floor height of 2800 mm. This is referred to as a "*rather traditional*" (Ibid., 1951: 28) solution chosen in order to ensure a wide use in current house building.

From practice and sociality to theory and politics

By the 16th century a fundamental shift had occurred in the role of the mason's craft in the art of building, as the mason gradually dropped into the role of serving merely as a builder for the architect: "…*who did not serve an apprenticeship but learned from book and thereby avoided the taint of being, or associating with, craftsmen*" Turnbull (1993: 331) argues. Being described as an essential characteristic of process of the division of labour, and thus in a *Foucauldian* reading: the formation of the disciplinary society (Foucault, 1991: 221) this slip between theory and practice (or reason and experience) according to Turnbull (1993: 326-328, 330-331) constituted the master mason in a new role as architectural expert, transformed skills into expertise, and essentially replaced the structural principles of Gothic architecture with efforts to derive design principles from general theory. We could say that the sector crossed a threshold; became epistemologised.

The slip between theory and practice is however not the only evidence of the formation of an increasingly more disciplinary sector. Also in the period from the 16th to 18th century a gradual transformation taking place in conceptions of what it means to exercise government in a wise and expedient fashion (Villadsen, 2002: 12) can be witnessed in the social sphere of building and construction. As briefly discussed in the first part of the dissertation, the transformation that takes place can be laid out schematically as follows:

Table 6. From the feudal problem of rule to the modern art of government (Villadsen, 2002: 13)

The problem of government in the feudal states (exemplified by Machiavelli)	**The modern art of government (exemplified by La Perriére and Roussau)**
How can the governor/prince maintain sovereign power over his principality?	How can the welfare and happiness of the population be maximised?
How can the prince's exercise of power be distinguished (that is: be justified as having a special, essential legitimacy) from other forms of power?	How can continuities be established between multiple forms of government at different levels: the state, the population, the family etc?
The object of government is first of all a territory and secondly the subjects of the prince.	State economy with all its regularities, processes and law is discovered as a field of intervention.
Knowledge of the divine, nature and, perhaps most importantly, the governor's wisdom and patience constitute the basis for the governments of the state. Principles are inscribed in the law.	The principles for the government of the state are immanent to the state and are to be known through scientific investigation: Political economy, demography, political philosophy etc.

In the contextual setting of this dissertation, one could thus argue that the social sphere of building and construction becomes an object of government; that it enters the consciousness of political rationality, or in other words: that the welfare and happiness of the population can be maximised e.g. by providing sanitary housing opportunities for all.

5.2 Transition: From sociality to politics and the state

Møller (2002) argues that up until the beginning of the 20th century the state and/or the city governments' efforts within the regulatory sphere was focused primarily on urban planning as well as on the development and introduction of principal rules for the construction of housing buildings with special emphasis on fire protection and wider social and sanitary issues.

This focus should be seen in the light of the rapid increase in the general population and the concentration of trade and manufacturing in the towns, and consequential movements of population away from the countryside. In the years 1850 to 1920 the population of the city of Copenhagen increased from app. 130.000 inhabitants to more than 550.000 inhabitants. The rapid growth gave rise to problems of e.g. sanitation, water supply and social related housing problems, and made necessary the development of a number of local building laws and statutes.

As an example of the subaltern part played by building and construction as a sector to be acted upon, as an instrument in its own right, in relation to wider social issues, we can focus on the development of a building law for the City of Copenhagen. According to Engelmark (1983) the urban development of Copenhagen was subjected to three building laws from respectively 1856, 1871, and

1889, which were further supplemented with a series of supporting provisions. With the law of 1856, the City of Copenhagen was subjugated to the first collective set of building regulative requirements. This law was much stricter than the previous, scattered building regulations – and it was furthermore accompanied with a re-organisation of the building authorities to ensure a more effective implementation.

Prior to the passing of the law of 1856 for the City of Copenhagen the building legislation consisted on a variety of different statutes, considerations and standards spread out on many different local authorities. The reason for this was according to Engelmark (1983: 41) the 'tradition' that legislative changes were made in response to urgent legislative problems – and because of this, the many different statutes were often only of limited scope. Thus the last statute to be passed prior to the collective 1856 building law was partly in response to the cholera epidemic in the latter part of 1853 and partly in response to the massive building activity on the areas outside the embankments surrounding the city, which were released for building purposes with the discontinuation of the demarcation resolution by law in January 1852.

Apart from the administrative inconveniences resulting from having a highly heterogeneous patchwork of often out-dated and conflicting legislations, Engelmark argues that the 1856 law also should be seen in response to a large societal change, where:

> *"…the newly instituted democracy (local government) hardly could permit that such an important part of the legislation should rest on past considerations. It is characteristic of the time that many and broadly composed commissions worked with the organisation of the new societal order." (Engelmark, 1983: 41).*

In April 1852 a 10-man commission was formed to compose a proposal for a complete building law for the City of Copenhagen, which was to replace all previous legislations in force. Engelmark writes that the very first action of this commission was to point out the absence of building regulating and sanitary provisions in relation to the emerging buildings on the aforementioned demarcation area, thus rendering the newly passed law obsolete.

The commission worked for two years on their proposal, which eventually was passed in 1856 by the Ministry of Justice, under which all legislative aspects of construction and building fall within. Engelmark argues that the 1856 building law was considered quite restrictive at that time even though it only contained few

considerations, which had not previously been covered by existing regulations. One of the most important innovations introduced with the law is in my eyes the requirement of compulsory construction permit application regardless of size or type of construction activity (Fleisher, 1985). Other new introductions by the 1856 building law were provisions relating to hygiene, recreational areas, sett paving, building materials, number of stairs per property, kitchen furnaces, sanitation, water supply etc. The 1856 builidng law for the City of Copenhagen eventually constituted the paradigmatic frame for all following building regulation for the entire nation (Salomonsen, 1916). One of the primary factors in the success of the 1856 building law in terms of its wider role as paradigm for subsequent legislation is that it not only succeeded in collecting a series of otherwise fragmented legislations, but also ensured a more well-coordinated development by de-bureaucratising the administration through a concentration of formal authority in through the establishment of a Building Commission, and the appointment of a City Master Builder and several building inspectors.

Engelmark (1983: 42-43) highlights three conditions in his discussion of the great impact of this law for the built environment of Copenhagen and not least its quality. First, that all significant provisions relating to building activities were collected in one law, thus making the procurement process transparent. Thus, in the motives for the draft bill over 80 different laws and statutes, together with more than of 2000 paragraphs, were mentioned – a collection of legislative devices, which had been developed during the previous 200 years. Out of this total, the new law rendered 32 of them obsolete, whilst the remaining app. 50 contained provisions, which either had nothing to do with buildings or still had to be enforced. The law of 1856 however contained the withdrawal clause that any other older laws being in conflict with the new law will, in so far that they still are in operation, be revoked (Engelmark, 1983: 42). Secondly, the provisions relating to structures and materials, formulated on the basis of the state-of-the-art theoretical-technical knowledge, were sufficiently precisely formulated to be appropriate and adequate to be in use for the particular type of buildings for more than 100 years. Engelmark thus argues that the Copenhagen building code of 1939 contains the almost exact same provisions on the design of outer walls, beams, and roofs as the law of 1856. The reason for this continuity Engelmark attributes to the fact that no major changes occurred within the typically used building techniques. The third and last condition for the success of the 1856 building law was, as briefly touched upon above, that the law was

followed by a re-structuring of the organisational set-up of the building authority and the establishment of an effective administrative practice focusing on the supervision of ongoing projects (Engelmark, 1983: 43).

These successes apart, the law however proved counter-productive in that it opened up for a much higher building volume to site area ratio than was aimed for. Engelmark (1983) argues that the real estate speculators stretched the provisions to the very maximum at that time. The law of 1856 contained e.g. no standards for the minimum size of living space, nor was it specified that dwelling rooms had to be equipped with windows. With the law of 1871 provisions were tightened up, so that recreational areas should comprise at least one third of the total living space, however not until the building law of 1889 was the use of windows in all dwelling rooms made compulsory. In its conceptual basis the law of 1889 was, by large, a direct continuation of the previous building laws for the City of Copenhagen, even though a series of new provisions had been made, and a majority of the existing ones had been tightened further. These tightenings were first and foremost of technical character, however the motives underlying the draft bill clearly states that the new law is to serve as foundation for the legislative work in such a way "…*that it [the legislative work] in this domain thus for a longer period of time can be considered closed for the City of Copenhagen*" (Engelmark., 1983: 44, own translation). This prediction came to be fulfilled as the next new building law for the city was passed as late as 1939.

As evidence of the relatively little national attention given to the construction and housing area as an independent or autonomous social system working on the basis of a clear and coherent set of rules, we can turn our attention to records of the Danish National Archives (SA), which contains entries from the following archive creators, i.e. public authorities, institutions etc. who at the time of archive creation were responsible for the specific archives in which the records are kept.

Table 7. Public authorities and regulatory institutions in construction 1849- (SA)

Grouping	Public authority, institution	Year of commission
National buildings and gardens	The Building Directorate	1849-1856
	Central Directorate for the Royal Gardens	1849-1859
	The Gardener of the Public Gardens	1850-1871
	Inspectorate for the Public Gardens	1871-1968
	State Equipment Commission	1862-

As can be seen, and compared to today's scope of public authorities within the field, focus here is solely on national buildings and gardens, e.g. in the form of a technical-

managerial coordination of civil building projects for the different ministries under the auspices of the Building Directorate (S.A., 1991: 2162).

Emergence of the field of construction politics

The construction and housing area as a nationally independent and collective field gradually received more and more attention in the first half of the 20th century. Heide-Jørgensen (1998: chap. 5) thus argues that the construction and housing area, which now had been transferred from the Ministry of Justice to the Ministry of Internal Affairs: "…*was under constant consideration in cabinet minister Bertel Dahlgaard's term in office [1929-40].*" Previous Home Minister C.N. Hauge had in 1924 appointed a committee for the examination of the governmental building administration. In 1929 the committee's report was published, and in 1931 Dahlgaard pushed through a law leading to the establishment of the National Building Council. The building council acted as advisory board to the cabinet ministers in questions relating to the public buildings and was instrumental in the efforts of defining and concerting a comprehensive part of the national building administration in a form, which eventually was continued and expanded in the National Building Directorate (S.A, 1991: 1874).

In 1933 and 1934 two housing benefit laws, giving legal basis for loans to local authorities and housing associations for construction of residential buildings for the needy, were passed. An additional housing benefit law in 1938 targeted the construction of residential buildings for families with dependent children. In addition to solving some of the housing related social problems of the time, the housing benefit laws had as side-benefit the effect that employment within the building trades was kept at a high level (Heide-Jørgensen, 1998: chap. 5).

In 1939 the Reconstruction and Housing Inspection Law continued and expanded the legislative focus on health and sanitation issues by specifying minimum requirement to dwelling rooms. In auspices of the National Board of Health a Housing Inspection Board was appointed consisting of the Chief Medical Officer (chairman), two judges appointed by the Supreme Court, and two technical experts by appointment of the Minister of Internal Affairs (S.A, 1991: 1888). The role of the board was to keep supervisor control with the observance of the regulations, whereas the immediate control was carried out by local inspectorates.

The state's right of scrutiny in the housing area however gradually expanded in the latter part of the 1930s primarily due to two laws: the leasehold law of 1937,

which restricted building owners' access to terminate leases and increase rents, and law no. 153 of April 13th 1938 (as well as the temporary law no 179 of April 9th 1941) concerning loans and subsidies to private housing (*cf.* Indenrigsministeriet, 1945: 10). The reason for providing public subsidy to private housing can primarily be attributed to the absence of social housing organisations in many local municipalities. The subsidy was however rather limited and only given to buildings with 24-36 apartments (LLO, n.y.). The limitations were later removed and with a series of interest rebates, the state hoped to promote the private housing market even further; however with only little success, as not many new buildings were completed.

Although the main emphasis in these activities was however almost exclusively placed on residential buildings, and even more on related social and urban-planning issues, other initiatives were also taken in these years; initiatives which constituted state-controlled organs as subjects being responsible for the governance and development of building activities. From the below list of authorities registered at the Danish National Archives we thus see the distinct field of *management of building activities* enter the arena in the form of the Building Control Board.

Table 8. Public authorities and regulatory institutions in construction 1907- (SA)

Grouping	Public authority, institution	Year of commission
National buildings and gardens	The National Building Council	1931-1942
Management of building activities	The Building Control Board	1922-1927
Technical conditions	The Electricity Commission	1907-1935
	The Electricity Council	1935-
	Danish Electrical Equipment Control	1930-
Housing conditions	The National Housing Foundation	1922-1972
	The Housing Inspection Council	1939-1982

In 1922 the Building Control Board was established by law. The board consisted of 10 members, who represented both employers and employees within different crafts, the municipality of Copenhagen, other municipalities, as well as trade organisations. The board was commissioned to monitor price relatives within the building trades – a responsibility previously left in the hands of the trades, *guilds*, themselves. The board was sanctioned to obtain information from municipalities, clients, organisations, craftsmen, architects, etc. and insofar the board estimated that illicit or unreasonable prices were taken, the disparity should be settled by negotiations between the parties (S.A, 1991: 1266). In 1924 the Building Control

Board furthermore introduced a bill, which eventually was passed and became the first law on city planning in Denmark (Møller, 2002: 129-130). Hauge supported the planning law, arguing that:

> *"It has gradually become common knowledge that there are very large societal interests in play concerning the manners in which cities develop, and in the current legislation we lack sufficient provisions in order to ensure that all conditions are taken into consideration, when discussing the construction of new streets or roads […] in the immediate vicinity of the Municipality." (Møller, 2002: 137).*

Møller (2002: 138) however argues that although the expectations to the law and its application were quite high in legislative circles, the law did not become a success, as it was facultative.

The institutionalisation of norms

Prior to, as well as parallel with, the public initiatives taken to form and reform the construction sector as series of regulatory undertakings were carried out both locally amongst the different trades and trades unions of the sector, and by the state itself.

National competitive bidding

Around the middle of the 18th century competitive bidding began to gain a footing in the Danish construction – first and foremost in relation to the harbour engineering works, but also in relation to other engineering works competitive bidding gradually gained acceptance (Nørregaard, 1942: 16). In the first instance competitive tendering was however not compulsory for at least two reason. First, works could not be included in the bidding as payments were agreed according to a fixed schedule of wages; and secondly, the vast multitude of local building laws and regulations were not concerted under a collective national governance frame. In 1790 competitive tendering was however made compulsory for all public building works, and eventually also for all public civil engineering works (Nørregaard, 1942: 17).

However, both in scope and impact this early national competitive bidding act was limited, and it can be argued that it only with the establishment of the Danish Association of Contractors in 1892 became institutionalised and began to function as a conceptual element in the construction sector discourse. The Danish Association of Contractors was established in 1892 as a result of a longer period of instability with latent (as well as open) conflicts between employers and employees.

Late 1891 and the start of 1892 saw the rise of a conflict of wages, which gave rise to one of the most fundamental institutions in the Danish construction sector: the piece rate system. On the conflict Nørregaard (1942: 44-45; own translation) writes:

> *"By summer 1891 it is apparent that a new and systematically planned offensive from the association of general workers in Copenhagen occurred. In the spring of the same year, M.C. Lyngsie became president of the association, and he was even more skilled than P. Hermansen [the former president]. The parole was that the daily wage had to be DKK 3, and the association established a committee to work on a price current for piece rate work"*

As can be seen from the point of the contractor, which Nørregaard represents, the systematic offensive launched from the workers' union consisted in a proposal to a schedule of wages demanding an estimated 15 pct. pay increase, which from the perspective of the still only partially organised contractors was totally unacceptable. Even from the perspective of the labour movement supported news paper the Social-Democrat these demands seemed too steep, however different trades took turns going on strike and through local negotiations many workers succeeded in their efforts. Spring 1892 the conflict reached new heights as the implementation of a longer workday for earth workers was met with a counter-claim for higher wages (Nørregaard, 1942: 45-46). Strikes and lock-outs took place all across the construction and building sites, however with the active involvement of the haulage contractors the conflict escalated as construction sites still in operation no longer could be supplied with the necessary building materials, leaving construction activities to come to a standstill.

As a result of the conflicts the contractors came to the understanding that they had to join forces in a common enterprise in order to establish the necessary 'bulked power' to stand up against the different trades unions. On May 1st 1892 the first general assembly in the contractors association was held with the participation of 25 local contractors operating in the City of Copenhagen. In April 1896 the association became nationally operating. The association had from the beginning the sole objective of acting as an employers' association to support each of the members against encroachments from the workers and to participate to the development of suitable working conditions (Nørregaard, 1942: 53-56). One of the most notable results of the work carried out within the first few years was the successful negotiations leading to the establishment of the collective agreement on minimum wages, which in Nørregaard's words had a locally stabilising effect on the working

conditions in the sector. As an example of this newfound harmony between employees and employers Nørregaard (1942: 59-60) mentions an incident from February 1896 when workers at the railway complex in central Copenhagen refused to sign the compulsory police regulations for railway works as they felt criminalised by what they saw as a constant police surveillance. Their refusal to sign the regulation was responded with by their dismissal. Nørregaard however argues that the contractors were displeased with this governmental intervention and decided to let work commence at their own risk and work towards a change in the police provisions. The Danish Association of Contractors took the case to the management of the State Railway Authority and argued that the current provisions were outdated and that a less extensive registration of all individuals receiving work permits would be adequate. At request of the State Railway Authority the Ministry of Justice eventually suspended the provisions in the regulations and even requested the contractors' association to give their considerations to the draft for the new proposals.

The establishment of general conditions for work and supplies

Not only in relation to what could be called the anonymous emergence of the contours of a national legislative governance frame for building and construction, but also in its formal establishment, the Danish Association of Contractors played a prominent part, as e.g. witnessed in the establishment of a set of general conditions for work and supplies (abb. da. *AB*). On the establishment of the *AB*, the National Building and Housing Agency, writes as follows:

> *"'General conditions for work and supplies' emerged originally in the end of the 19th century in preparation for use in railroad- and marine structure works. In 1915 the Ministry for Public Works released a new set 'general conditions for work and supplies' now encompassing building and civil engineering work in general, and which was deliberated with the building and civil engineering parties." (Bygge- og Boligstyrelsen, 1993a: 5).*

These deliberations, innocent as it sounds in the above, were according to Nørregaard (1942: 115) of quite fundamental character. First, the contractors found it to be unreasonable that they did not receive any compensation in the case that parcels of land or necessary supplies were not provided in due time. Furthermore, the contractors argued against being forced to make a proposal on works they could not assess in advance. Finally, Nørregaard brings forth a third issue of debate being the contractors' dissatisfaction with the insufficient, at times only simple layout-

drawings, which were provided at private railway projects. Today these conditions are all covered by provision of the general conditions; however in the two years that passed between the preliminary deliberations and the realisation of the general conditions, the contractors' association had to resort to self aid by introducing a so-called notification commitment, in which all members of the association bidding for railway projects had to notify the board of the association, who then was given authorisation to submit reservations to the authority in charge of the tender; reservations that would then be applicable for all members. The notification commitment stood until 1921 (Nørregaard, 1942: 117), whereas the 1915 conditions for works and supplies stood unchanged until 1951, where it was revised on account of the expressed perception of a series of the industrial parties that the development had outdated the provisions. One of the changes in 1951 was that the construction client once more was sanctioned to make demand for changes in the original arrangement without the acceptance from the other parties. This right, which today is governed by paragraph 14 of the 1992-general conditions, can be seen as a legislatively sanctioned strengthening of the client, although it comes with a price to pay, in that the contractor not only possesses a *moral* but also is given a *legal* right to conduct any additional work ordered by the client. Nevertheless this can be seen as a substantial reinforcement of the client's role – a reinforcement, which as will be discussed in the next chapter, took place gradually around the time of the Second World War, as external market conditions changed radically.

6. Stratification and the construction sector

I argue that where the construction sector in the latter part of the 19th century and the first part of the 20th century had begun to develop into a coherent field located at the threshold of positivity, things changed around World War II.

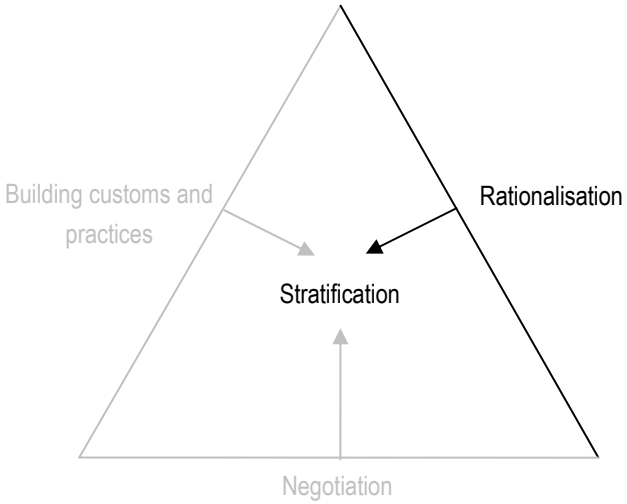


Figure 15. The analytical focus of the chapter

The immediate post-World War II epoch thus saw the rise of the idea of the building sector as an instrument of knowledge; an element of discourse, which not only was to be acted upon, but also to be acted with in order of initiating wider societal changes and transformations outside its immediate sphere – regulatory as well as instrumentally.

6.1 Discipline and stratification

In the present chapter I will discuss the formation of the 'modern construction sector' from the analytical point of discipline. I will start by discussing the formation of a distinct policy problem prescribing the adoption of disciplinary technologies in Danish construction. Secondly, I will describe the means of persuasion and forms of legitimacy this policy took on. From here, I will proceed with an examination of how the modality and general principles of discipline can be traced in various, central elements (e.g. methods, techniques, processes, and instruments), which were

developed in order to fulfil the policy intentions. In other words, this chapter constitutes an attempt to describe how a series of social technologies, which we have come to understand today as central or indeed immanent to the notion of the 'traditional' construction sector, can be seen as disciplinary mechanisms crystallised or being adopted in response to particular societal needs (Foucault, 1991: 138) related to the housing and material shortage during the Second World War. I will however start in another place.

The disciplinary gaze

Foucault in Discipline and Punish writes that *discipline*, as a *political anatomy of the detail*; as a *utilitarian rationalization of detail in moral accountability and political control* was accelerated, changed in scale and given precise instruments in the classical age, where the body was discovered as object and target of power (Foucault, 1991: 137-139). The invention of this political anatomy is in Foucault's words not a sudden discovery; it is rather:

> *"…a multiplicity of often minor processes, of different origin and scattered location, which overlap, repeat, or imitate one another, support one another, distinguish themselves from one another according to their domain of application, converge and gradually produce the blueprint of a general method." (Foucault, 1991: 138).*

Modality and characteristics of discipline

Where the *law dispositive* operates on the division between wanted and unwanted and operates *posteriori*, discipline according to Foucault (1991: 137) implies:

> *"…an uninterrupted, constant coercion, supervising the processes of the activity rather than its result and it is exercised according to a codification that partitions as closely as possible time, space, movement."*

Thus whereas sociality based on the *Law* opens a given social field in that it makes judgements based on facts, discipline closes the field and possible courses of action by disposing or codifying future actions: "*Discipline produces subjected and practiced bodies, 'docile' bodies*" (Foucault, 1991: 138). From this statement, Foucault (1991: 141-169) advances four general principles or social technologies, which control and affect the body in a manner different from force or violence, and from which discipline proceeds. These are:

– The art of distributions.
– The control of activity.

– The organisation of geneses.
– The composition of forces.

In addition Foucault (1991: 170-194) examines three elements on which the success of disciplinary power depends, i.e. the means of correct training:
– Hierarchical observations.
– Normalising judgement.
– The examination.

Disciplinary technologies

The disciplinary technologies that Foucault deals with spatio-temporal stratification (*cf.* Jensen, 2003). Foucault (1991) thus maintains that in the first instance discipline proceeds from the distribution of individuals in space, and to achieve this end, several techniques are employed in the form of:
– *Enclosure*, i.e. the specification of place heterogeneous to all others and closed in upon itself (p. 141).
– The principle of *partitioning*, i.e. each individual has his own place; and each place its individual (p. 143).
– The rule of *functional sites*, i.e. the coding of space so that particular places is defined to correspond to the need to supervise as well as to create useful/productive space, e.g. in the form of the serialisation of the mass-production process (p 143-145).
– *Rank*, as a principle of distribution of elements. In discipline elements are interchangeable, since each is defined by the place it occupies in a series, and the gap that separates it from the others (p. 147).

As for the control of activities, Foucault identifies five key techniques immanent to the exercise of discipline:
– The use of *time-table*, although not a new invention this strict model of sequencing nevertheless spread and was taken up with the new disciplines. The time-table is the general framework for an activity (p.149, 151).
– *The temporal elaboration of the act* is the imposing of an obligatory rhythm; a programme which assures the elaboration of the act itself in that it defines articulations, the position of the body and the limbs (p. 152).

– *Correlation of the body and the gesture*, i.e. the imposing of a best relation between a gesture and the overall position of the body (p. 152).
– *The body-object articulation*. Discipline defines each of the relations that the body must have with the object that it manipulates (p. 152-153).
– *Exhaustive use*. Discipline arranges a *positive economy of time*, which poses the principle of an ever-growing use of time – time can be exhausted rather than just used, and one must seek to intensify the use of the slightest moment (p. 154).

These principles are described by Foucault as a technique of subjection, which formed a new type of object: the body of exercise manipulated by authority (1991: 155) to ensure correspondence between plan and action.

Exercise, according to Foucault (1991: 161) is the technique by which one imposes on the body tasks that are both repetitive and different, but always graduated. The coming-into-being or geneses of the body of exercise is especially evident when observing transformations in pedagogical practice from guild apprenticeship to modern schooling. Where the first, as previously seen, can be characterised as an open learning landscape in which the statutory duration of the training is concluded by a qualifying examination, but is not broken down according to a precise programme, as is the case in modern society (Foucault, 1991: 156), where time was added up and capitalised by a) dividing duration into successive and parallel segments, each of which ends with a specific time; b) organising the segments according to an analytical plan; c) finalising the temporal segments with an examination to decide if a required level has been reached; and d) drawing up series of series to fixate each individual in a temporal series, which defines his rank or level (p. 159).

Finally, Foucault (1991: 164) argues that discipline is an art of composing forces in order to obtain an efficient machine. This means that: a) the individual body becomes an element that may be placed, moved, or articulated on others; b) the time of each element/body must be adjusted to the time of the others, i.e. that each part must correspond to the other parts according to the prescribed series of events; and c) orders/commands need not be explained or formulated; they simply have to trigger off the required behaviour. As such behavioural norms and specific actions are inscribed in the 'machine' – and conversely, the machine thus prescribes a certain sociality.

Means of correct training

Based on these principles and techniques of disciplinary power, Foucault (1991) advances by examining how discipline makes or trains individuals through the use of simple instruments such as *hierarchical observation*, *normalising judgement*, and *examination*. I will not dwell at length at these instruments, but just give a brief presentation of these for the sake of argument and later use.

On the topic of hierarchical observation, Foucault (1991: 170-177) argues that discipline presupposes a mechanism that coerces by means of observation. In his eyes, that perfect disciplinary apparatus would make it possible for a single gaze to see everything constantly, and a central point would be both the source of light illuminating everything, and a locus of convergence for everything that must be known (p. 173).

Secondly, discipline operates through normalising judgements as its principle of penalising. In doing so, it brings five distinct operations into play (Foucault, 1991: 182-183): a) it refers individual actions to a whole; b) it differentiates individuals from one another according to an average to be respected or an optimum towards which one must move; c) it measures in quantitative terms the abilities of individuals; d) it introduces the constraint of a conformity to be achieved; and e) it traces the frontier of the abnormal.

Finally, the examination combines techniques of an observing hierarchy and those of a normalising judgement (p. 184). Through the examination it is possible to qualify, classify and punish those who fall outside the normal.

6.2 Formation of the field of rationalisation

When discussing the start of the Danish construction policy tradition commentators often argue that the year 1947 constitute an important milestone, as this was the year that Denmark and the Danish construction sector for the first time was represented by its own ministry: The Ministry for Construction and Housing Authority (da. *Ministeriet for Byggeri og Boligvæsen*) (Bertelsen, 1997; Boligministeriet, 1997). This year would in other words seem like a relevant place to start this story however we have to go a few years further back in time to understand the wider socio-political context of the construction policy tradition.

As a consequence of the outbreak of the Second World War in 1939 market conditions changed radically. One of the most urgent national industrial problems

associated with these changes was the rising unemployment across all industries, which was especially profound during the first years of the war. In the winter of 1941 unemployment in Denmark rose to a record high level of 36 pct. (Kirchhoff *et al.*, 2002) and especially unskilled labourers were beset by the development and had to support themselves on unemployment benefit from special unemployment funds. As a result, the Prime Minister's Office established the Governmental Employment Committee June 12th 1940 (da. *Regeringens Beskæftigelsesudvalg*), with the task of reviewing proposed plans to create new or increased employment opportunities in the light of the changed market conditions that the outbreak of the Second World War had triggered. This committee replaced the Prime Minister's Office's work committee, which was established just three months earlier the same year, but quickly dissolved with reference to the rapid societal changes, which had created uncertainties as to the opportunities and results, which could be achieved. Unlike the preceding committee, the Employment Committee was a joint ministerial committee consisting of representatives from the other major ministries, i.e. the Ministry of Finance, Public Works, Social Affairs, Trade, Internal Affairs, Agriculture, and Education (S.A, 1991: 1314). With the government reshuffle in 1942, also the ministers from the newly established Ministry of Labour and Ministry of Transport joined the committee creating a very weighty constellation of governmental actors with very broad decision-making competencies, and thus accordingly potential for coordinated governmental action.

The plan seemed to work. From 1941 and onwards more and more people was employed – a high number of these by the German occupation forces, who according to Dalsager (2005) employed more than 100,000 Danish workers for their construction activities in relation to the completion of a series of military buildings (bunkers) on the Jutlandic west coast. Salaries and construction materials on these projects were financed through loans from the Danish government, who in return neglected the housing market and furthermore was met by shortages in construction materials. Jensen (n.y.) thus argues that during the war not enough housing buildings were constructed to meet the demands of society – especially in the cities (and most notably in the City of Copenhagen) housing was scarce. The housing issue was therefore anticipated as a policy problem at the end of the war, at which time more than 4,000 families was registered as homeless.

Furthermore Jensen writes that the so-called 'latent housing demand' was as high as 29,000 dwellings on top of which came an estimated housing reserve demand for

an additional 15-20,000 units. All in all, the housing shortage as calculated by the Ministry of Internal Affairs in 1946 stood at an estimated 48-53,000 housing units, which in Jensen's words constituted the housing shortage as an irrefutable and imperative policy problem with both strong economic regulatory connotations as well as very specific construction technical suggested solutions.

Rationalisation – or the problem of the irrational

In his paper on the establishment of the so-called Danish productivity drive Kjær (1998: 8) argues that the end of Second World War triggered a series of attempts to put rationalisation and productivity on the agenda both in the industry as in the economic policy making.

Unlike earlier attempts to further the productivity of the Danish industries, which according to Kjær (1998) had been rather fragmented and confirmed to particular groups and institutions, the immediate post-war efforts to problematise rationalisation took on a much broader political and general economic scope. The productivity drive was formally launched in December 1949, when the Ministry of Trade and Industry set up a productivity council and assigned financial and administrative resources to the development and implementation of a national productivity programme; however the grounds for this initiative was, as argued above, broken as early as at the start of the Second World War.

Kjær (1998:10) thus argues that in the months after the Second World War the concept of rationalisation seemed to be on the lips of everybody in Denmark – to such an extent that it even resembled a religious movement. One of the reasons for this was that the concept of rationalisation was re-politicised in the sense that several key political and social actors formulated problems of rationalisation as a part of their articulation of conceptions of the future of the Danish society after the war. When Kjær argues that the concept of rationalisation was *re*-politicised, the reasons are that ideas associated with rationalisation were not unfamiliar in a Danish context. Unlike Sweden, who had experienced a 'proper' rationalisation movement in the inter-war period, discussions in Denmark had focussed more specifically on e.g. local or isolated experiments with the Taylor system (scientific management) in assembly line production, and had thus not evolved into a common or unifying interest in the economic development (*Ibid.*, 1998: 11). Adding further to the lacking impact of rationalisation was the growing concern with the downsides of rationalisation on behalf of the labour movements.

Rationalisation and the control of activities – A lean approach?

Within the labour movements rationalisation had thus been linked to notions of unemployment, monotonous work processes, loss of autonomy etc. – notions which are still aired today, when discussing modern day production concepts such as e.g. Lean Production, or the construction equivalent Lean Construction (*cf.* Green, 1999; Hansen, 2006). Green (1999), raising a strong, and admittedly almost caricatured harsh, criticism of lean construction thus claims, that in an international perspective:

> *"…the implementation of lean methods cannot by separated from the all-out assault on trade unionism launched by the Reagan and Thatcher administrations in the US and UK respectively. This assault was inevitable in the face of increased global competition." (Green, 1999: 25),*

Focusing specifically on the implementation of lean methods in two British car manufacturing companies, Green furthermore states, that:

> *"Despite the high wages, workers frequently complained about poor safety standards, stress of work, loss of individual freedom, and discriminatory employment practices […] Whilst the workforce may be grateful for the relatively high-paid jobs that Nissan provides, it would seem that there is a price to pay in terms of worker autonomy." (Green, 1999: 26).*

In conclusion, Green argues that:

> *"In this respect, the assumptions of Womack and Jones (1996) are uncomfortably similar to those of Taylor (1911)." (Green, 1999: 28).*

These arguments are to some extent similar to those put forward in a Danish context by Bahnsen (1954: 59-63) as early as in 1954, where he in a lecture discusses labour psychological problems in relation to rationalisation in construction. Bahnsen in his lecture however emerges as a stern proponent of the rationalisation and attempts a deconstruction of the following four main causes of resistance towards rationalisation in order to demonstrate their irrational character:

1. The fear of unemployment.
2. The question of the economic consequences of rationalisation for the workers.
3. The fear of being exposed to improper pressure.
4. The resentment towards change.

As for the first concern or cause of resistance Bahnsen states that the (blue-collar) worker has the sensation that rationalisation has a tendency to render obsolete the labour force; a sensation which however can be dismantled on basis of the labour economic textbooks. Any unemployment due to the efforts of rationalisation will only be temporary and local:

> *"…if a company – or a nation – do not rationalise, it will not be able to compete in the long term, and then all its workers risk unemployment." (Bahnsen, 1954: 60).*

This fear of unemployment, despite scientific proofs for the opposite, is a general human factor, and the necessary precondition for the active participation in the rationalisation efforts has to be found in the form of the establishment of economic, occupational, and social measures to strengthen the workers' sense of security.

Secondly, there is also the question of the immediate economic consequences of rationalisation, where Bahnsen identifies the piece rate system as the sore spot if the wages have to be negotiated on basis of time and motion studies rather than on the basis of the traditional fixed schedules of wages, which have evolved continuously over the course of centuries, and are seen as hard-fought rights. The problem according to Bahnsen arises, if the workers' profits margins turn out to be too high compared to the schedules. This would thus lead to a re-negotiation of the piece rates, and be perceived as a de-stabilisation of these institutionally-anchored rights. To avoid this resent Bahnsen calls for the necessity of a compensation scheme, *in so far* an agreement can be reached that the workers have to increase their efforts.

As for the workers' fear of being exposed to improper pressure, it is argued that this is a valid concern as this has been the case previously; *however* it is the *isolated* time studies who have given rise to these *aberrations*, which can be prevented through thorough work and activity studies (Bahsen, 1954: 61). Unlike Green Bahnsen however insists that it is neither the fear of a *robot-existence* nor the sense of *conformity* and decreased autonomy that constitutes the greatest problem; it is rather the aspects being characteristic of mass production in general, i.e.:

– The *work tempo*, being mechanically determined and controlled.
– The *element of repetition*, leading to monotonous repetitive work, and thus.
– The *minimum-of-skill requirement*, i.e. a de-qualification of the worker.
– The *pre-disposed character of work*, i.e. that the workers are deprived the freedom of tools and methods.

– The *increased specialisation*, which only permits the labourer to work on limited parts of the final product, which breeds.
– *Surface attention* resulting in inferior work quality.

As can be seen a division between the effects of the new rationalisation efforts and the effects of mass production is inserted. Where the unpleasant consequences of the former can be counter-acted in an almost dialogical fashion by reasoning with the workers (Bahnsen, 1954: 62), the unpleasant consequences of the latter, of mass production, just have to be accepted as it is a natural part of the development and all-in-all entails better working conditions than previously witnessed.

Here we touch the final cause of resistance; the resentment towards change, which Bahnsen sees a somewhat universal human trait not unlike what is argued by Machiavelli (2006: chapter 6) who writes:

> *"And it ought to be remembered that there is nothing more difficult to take in hand, more perilous to conduct, or more uncertain in its success, than to take the lead in the introduction of a new order of things. Because the innovator has for enemies all those who have done well under the old conditions, and lukewarm defenders in those who may do well under the new […] It is necessary, therefore, if we desire to discuss this matter thoroughly, to inquire whether these innovators can rely on themselves or have to depend on others: that is to say, whether, to consummate their enterprise, have they to use prayers or can they use force?"*

Where Machiavelli however argues for the necessity of applying armed force in fixing people in a persuasion of the benefits of the new order, Bahnsen's suggestions represent a rational comprehensive regulatory approach (*cf.* Bacchi, 1999) to governance in which the problem is readily identifiable, a best collective decision can be rationally and analytically determined, and the solution takes the form of a 'technical fix.' In the light of these concerns it is striking that rationalisation caught on to such an extent as it did, without resorting to *Machiavellian* methods.

Means of persuasion

Kjær (1998: 10) argues that whereas rationalisation in a pre-war context: "…*tended to be interpreted along political and social lines of division. Or it remained a preoccupation of a limited number of academics or engineers*", the concept undergone a series of re-coding attempts after the Second World War, making it a part of a construction of common interest in economic development – rather than an object of division. One such an attempt

was the formulation of a problem of rationalisation put forward by the Danish Social Democratic Party and the labour movement in 1945.

Thus, in the Social Democratic post-war programme, entitled 'Denmark of the Future' (Socialdemokratiet, 1945) Kjær (1998: 11) writes that the authors saw two major problems that threatened "…*not only the welfare of Danish worker but the entire population*" being the recurrent economic crises and the lack of efficiency in production. The latter was tied to the particular economic conditions during the war, as well as to a lack of planning and cooperation in business and industry.

The program set up three goals, two of which, full employment and social security, were to be achieved via macro-economic measures, whereas the last, efficiency and democracy in economic life, was to be achieved through the establishment of firm level joint production committees (*Ibid.*). Arguing that the Social Democratic Party's defeat at the 1945-election led to a downplay of the ideas of work place democracy, Kjær notes that the idea of joint production committees came to play a very important role in the following years instead. The underlying rationale was that only by rationalising and modernising production was it possible, in the long run "…*to improve the welfare of the working population through wage increases - and through political means*." (Kjær, 1998: 12).

Another attempt to recode rationalisation according to Kjær is found in the context of the National Federation of Industry, where the overall problem of how to reach and surpass pre-war levels of production was formulated. Here two obstacles to increased production were identified, being currency problem and the lack of workers in the industry, both of which called for measures towards rationalisation in order to be bypassed. This however, necessitated a concerted effort both on the side of industry and in relation to labour:

> *"It required an overall mobilization to improve the productivity of individual plants, cooperation among firms in particular industries and sectors to enhance specialization, standardization and joint research and development, political initiatives to combat unproductive economic structures, and 'a trusting and open cooperation between workers and employers (Christensen 1947: 30)." (Kjær, 1998: 13).*

Thus, it is argued that even workers allegedly had an interest in rationalisation, as in a competitive economy increased productivity would automatically result in better and cheaper consumer goods and hence maintaining and improving real wages. This is also evident both in Bahnsen's (1954: 62-63) list of means to persuade the

labourers of the necessities of rationalisation and when reading Jørgen Pedersen's (1947: 8-9) '*Nogle Betingelser for en Friere Økonomi i Danmark*' (En. '*Some Conditions for a More Free Economy in Denmark*') where he argues for the above common societal interest in rationalisation, and adds that a strict control with all building and construction activity must be maintained in order to fulfil the goals.

These two attempts to politicise and recode rationalisation were linked to an ideal conception of productivity, according to which there was both a common interest in increasing productivity at all levels in society, but also a mutual responsibility to engage in joint efforts to increase productivity. Rationalisation therefore was not seen as:

> *"…an instrument of management and control but a process of cooperation in the quest for productivity. Productivity at the same time was a rather empty concept, but it promised that there was a relationship between the activities on the factory floor, the performance of industry and the overall development of society, and that this relationships could become a relationship in which everybody would benefit." (Kjær, 1998: 13-14).*

This is e.g. seen in publication 'The specialised worker and work studies' (albeit from 1969) published in collaboration by the Danish Association of Contractors and the Danish Union for General- and Specialised Workers (Dansk Arbejdsmands- og Specialarbejder Forbund & Entreprenørforeningen, 1969: 3; own translation):

> *"Ever changing work methods and materials have made it increasingly difficult to provide the foundations for a rational process and correct remuneration. The purpose of work studies is i.a. to provide data, i.e. knowledge on the performance of machinery and the duration of work processes. With this information it will be possible choose suitable work methods for the benefit of both parties. Herby productivity will be increased, which is a precondition for better employment…"*

Thus, the above reading is in my eyes also somewhat satisfactory for understanding the situation in the construction sector; however with one or two additions as discussed below.

The public construction client

Where the manufacturing industry Kjær deals with had their firmly rooted subjects and objects of discourse, being organisations of industry and labour respectively other actors such a managers, workers and the broader population, the construction sector's conceptualisation and instrumentalisation of the problem of rationalisation

was at the outset born together with a new macro-actor, which rather drastically altered the conceptual space, which was created on the basis of the concept of productivity and the strategy of rationalisation, namely the Public Construction Client.

Rights, development and the responsibility towards society

Although it was not a new thing for the state to be engaged in building and construction in one or another form, the 1940s onwards saw the rise of the public construction client – an actor accorded the right to intervene in the affairs of the sector, and whose self-understanding in my eyes is quite well reflected in Møller (1954). Svend Møller, who at that time was the Copenhagen City master builder, describes the tripartite role of the building authorities as follows:

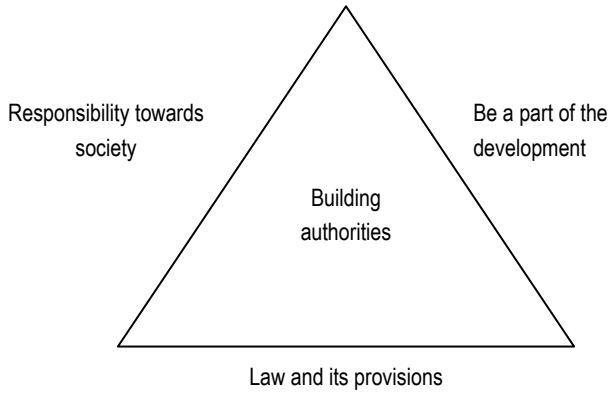


Figure 16. The tripartite focus of the building authorities

Møller's basic agenda is to present the building authorities as a legitimate actor in the efforts to promote new building methods. He writes:

> *"In these gradually more comprehensive efforts many different experts participate, and I see it as my task to remind you all of one participant in this team, who not always is appreciated, some times not even respected, and therefore has to suffer the indignity of being seen as an enemy, or in the worst case an unpleasant inhibitor of development and of the free market forces in play; the building authorities." (Møller, 1954: 73; own translation, original emphasis maintained).*

As for the law and its provisions, Møller (1954: 73-74) argues that all in all Danish building legislation, with the sole exceptions of the Copenhagen law and the Gentofte bylaw, is *weak and irrational*, as it rests on old traditions in Danish building. However, as long as the current laws are seen in relation to traditional building methods, which are still predominant in the 1950s, they are both up-to-date and

rational. The problem according to Møller, however is that when the traditional methods and materials are substituted for "*the new, the special, the untraditional*" the rules of thumb in the provisions do not suffice any longer. In other words, change bread (political) irrationality as law and its provisions no longer can maintain its status as an a priori of practice; as something that makes itself felt and has a fundamental impact on sociality through prescribing for people what to do, i.e. what is forbidden and what is permitted (Raffnsøe, 2003: 13). Some of the new materials to emerge and destabilise the existing rationality of building were e.g. the reinforced concrete and steel sections from the turn of the 20th century, which Hansen (1954: 77) suggests have provided us with valuable experience and knowledge; however, at the expense of worn down or even dangerous buildings today.

Building authorities thus has to interfere in the sociality of building by controlling and monitoring (Møller, 1954: 74-75) as a guarantor for society:

> *"One knows with some certainty how it [quality and building methods] is the case with hard-burnt bricks, but not how it will go with blocks of some more or less known material." (Møller, 1954: 74).*

The authorities have to intervene in order to specify what is satisfactory for the petitioner; something which however can take some time, as the process of testing e.g. new materials can be quite time consuming; giving the authorities the wrongful reputation of inhibitors of development (Møller, 1954: 75). Møller however argues that it is only fair towards society for the authorities to step on the brake if uncertainties prevail, and that this cautiousness behaviour might lead to the loss of value: "…*it is unfortunate, but probably inevitable. There are not many, who in a generally conservative building sector want to be guinea pigs.*" (Møller, 1954: 75). Hansen (1954: 77) describes the role of building authorities as a cross between examiners and public critics. Third and finally, Møller argues that the authorities' posses an *urge* to be part of the development and with its entire attitude and work contribute in the efforts to make housing cheaper.

The formation of objects of regulation

An early example of how the public client administered its role as an authority of delimitation with the right to delimit, designate, name and establish a given object of discourse can be found in (IM, 1945).

At the aforementioned Governmental Employment Committee's initiative, the Ministry of Internal Affairs formed a building committee (da. *Indenrigsministeriets*

Byggeudvalg), who undertook a series of very detailed examinations of principal character concerning the occupational, financial, technical and social impact of building activities. The committee was commissioned to (Indenrigsministeriet, 1945:10):

1. account for how much housing construction could be procured in a normal way with the use of available materials,
2. put forward proposals for the legislation necessary in order to stimulate the private and cooperative housing construction sufficiently enough to kick-start this type of construction,
3. put forward proposals, which brings about such an increase in refurbishment of city properties that the necessary increase in employment can be achieved,
4. put forward proposals for the completion of the necessary heat-isolation of buildings,
5. evaluate the different redevelopment plans and plans for building on expected material inlet,
6. put forward proposals for material-saving approaches in the construction sector,
7. put forward proposals for an agreement relating to the financing of the priorities of the public funding,
8. monitor the development of the construction sector and make recommendations for future measures necessary for maintaining the employment rates in the sector.

One of the primary sources of inspiration for the committee was the activities in relation to standardisation and rationalisation of the Swedish construction sector – especially the focus on batch manufacturing of small residential houses.

The report concluded that in order to dismantle the accumulated housing need and provide housing opportunities to facilitate the expected population growth it would be necessary to maintain an annual housing production of 30.000 units for the five year period to follow. Furthermore it was concluded that:

> *"…when the actual housing shortage is dismantled it will, for a very long period to come, be necessary to maintain a comparable production in order to complete a needed redevelopment of worn-out properties as well as to advance a needed improvement of the national housing standard." (Indenrigsministeriet, 1945: 13)*

The success of this programme was however linked to a series of conditions, which were to be solved in order to meet the intended requirements. Three main areas

were discussed, being that of available construction sites, available labour force, and available materials. Where the first two conditions could be met relatively easily, e.g. through public expropriation in the form of compulsory acquisition or through more centralised urban planning authority, the latter condition was deemed more difficult to achieve. Three solutions were put forward. Firstly, that the war-time experiences of material-saving construction technology should be utilised. Secondly, that the most material demanding projects should be postponed until the situation had improved. And thirdly, that construction activities should be instigated in anticipation of increased future inlet of materials and that a part of the then current material-distribution schemes should be maintained. Thus, based on the assumption that the import of constructions materials would be limited for some years to come, partly due to the increased foreign construction activities, the committee focussed especially on measures towards *regulating the consumption of construction materials*. The reasons for this explicit focus were that experiences during the war had proved that:

> *"…there can be achieved a very substantial reduction in the consumption of materials, which is necessary for the completion of a certain investment programme through the technical processing specific projects are subjected to by the authorities." (Indenrigsministeriet, 1945: 82; own translation).*

It is further argued in the report that the rationing of supplies and materials, which The National Building Board (da. *Byggenævnet*) prompted during the war had shown that it to great extent is possible to adapt the technical constructions to the materials, which were at its disposal. This of course had the obvious down-side that certain otherwise sound and common technical constructions had to be forbidden by law. The iron shortage e.g. meant that the use of cast top slabs in residential housing was prohibited. It was furthermore predicted that in the future it would be necessary:

> *"…for the power of the state [da. statsmagten] to intervene in the technical constructions of building sector." (BM, 1945: 83).*

This power of the state to intervene in the technical constructions of building sector was later legally affirmed in 1960 with the introduction of the first national set of building regulations, as a part of the first federal building and urban land use code (da. *Landsbyggeloven*).

As can be seen above, the declared objects of the political efforts encompass a very broad spectrum of focus areas making it difficult to pin-point exactly the

principle in operation with regards to which causalities between objects are established in this rationalisation discourse. One thing is however evident and that is that the public construction client's domain is constituted by objects that are accorded the status of irrational or insufficient in the light of the political declarations of intent *and* which can be rectified according to a system of optimisation by applying *scientific measures*.

Scientification and the dispositional character of the Marshall Plan

In my eyes, one of the most prominent reasons as to why the rationalisation efforts took the form of what could be called a *scientification of the art of building*, drawing heavily on inspiration from industrialised production and the principles or characteristics of disciplinary power, have to be attributed to the influence of the Marshall Plan.

In the 1945 white paper from the Ministry of Internal Affairs' building committee it is argued if rationalisation in construction is to be achieved, a concerted, i.e. organised and planned, building research effort, in the form of a National Building Research Institute, would be required. Hitherto, the existing building research had been decentralised with each of the existing actors focusing narrowly on their own specific building-technical areas of expertise without regards for any possible correlations between the different studies as well as for the practical application of the results (Indenrigsministeriet, 1945: 167-168). To strengthen the possibilities for *rational* building research, the Danish Building Research Institute was formed. The Ministry of Internal Affairs (and later the Ministry of Housing) provided the Institute with the necessary operating finances, and the Institute was furthermore authorised to mobilise additional funds in order to conduct additional particular duties and assignments (Indenrigsministeriet, 1945: 204). Later, in December 1949, and after negotiations with both sides of the industry, the Minister for Trade established the so-called Productivity Committee, which was commissioned to consider the question of efficiency in the industry in the light of international efforts to liberalise the foreign trade. As a part of this initiative an associated secretariat was established, whose role it was to communicate the technical information service for industry and commerce under the Technical Assistance Programme of the Marshall Plan.

The Technical Assistance Programme (TAP) of the Marshall Plan came to play an important role both for the work of the Building Research Institute as well as for

the forms of management, organisation, and work within the sector. Boel (1998) argues that the American politics of productivity embodied in the TAP were generally thought of as a means to recast the Western European societies in an American mould:

> *"'Feudal' management practices and 'socialist' labour attitudes were to be jettisoned, questions of income distribution to be depoliticised and treated as technical matters concerning the best ways to improve output and collective bargaining between social 'partners'." (Boel, 1998: 37)*

On a similar note, Pedersen (1995: 47-48) describes the Marshall Plan as a 'social technology'; a tool for regulating human behaviour by means of surgical incisions in the social and psychological states of society, which created and legitimised technical-rationalist approaches in planning and politics by drawing exclusively on principles from the natural sciences (*Cf.* Hull Kristensen and Kjær, 2000: 6). Thus, it was with either funds or influence from the Marshall Plan's TAP that a whole series of rationalisation efforts was launched in the following years. In 1953 the Ministry of Housing e.g. established a productivity fund committee administering funds in accordance with the stipulations of Law no. 85 of March 31st 1953.

§ 1. With the purpose of contributing to a continuous development and efficiency improvement of the Danish business community for the benefit of the Danish society as a whole a productivity foundation is established.

§ 2. Of the amount, which after December 31st 1951 is deposited on the special bank account at the Danish National Bank for payments received in accordance with the European Recovery Programme, DKK 31,720,000 will be transferred top the in § 1 mentioned foundation.

§ 3. Subsection 1. An amount of DKK 26,065,000 of the foundations' funds subsidies can be paid out to the following activities:

- DKK 6,000,000 for the training of consultants as well as to information and inquiry activities relating to productivity enhancing measures in the areas of industry, craft, and trade.
- DKK 4,500,000 for productivity enhancing measures within the construction sector, including the establishment of an Information Office as well as the training of construction consultants.'
- DKK 15,000,000 for productivity enhancing measures within agriculture, including the establishment of an Information Office, inquiries and courses relation to mechanisation, the establishment of a Demonstration Office relating to the feeding of live stock etc., ensilaging tests, inquiries relating to building conditions, as well as agricultural economical youth work.
- DKK 565,000 for inquiries and information activities relating to household problems as well as for consumer information.

Figure 17. Excerpt of Law no. 85 of March 31st 1953 (Finansministeriet, 1953; own translation).

Although this law not explicitly declared the need for scientific (more notably industrialised) means, it nevertheless 'lay in the cards', and below I will examine multiple examples of actual techniques and methods, which were developed in the following years, and eventually laid the basis for a series of subsequent laws, further strengthening the disciplinary practice of today's construction sector.

6.3 Actualisations of rationalisation

In the following, I will examine several specific examples of how the modern principles of construction, adhering to the ideal of *the rational*, focussed on the specificities of the detail and on ensuring correspondence.

Interestingly, when discussing building and construction today it is often argued that the efforts after World War II were focused on *industrialising* the sector (*cf.* Bertelsen, 1997; EfS, 2000a); that *industrialisation* was the strategic response to the urgent need of providing sufficient and adequate housing opportunities for all in a time of shortage. The former Danish trade promotion authority thus writes:

> *"The driving force in Denmark and in the rest of Europe after World War II was the housing sector [...] In order to achieve growth in the housing sector corresponding to the politically determined goals […] an industrialisation was necessary." (EfS, 2000a: 26; own translation, emphasis added).*

Bertelsen (1997: 15) mentions, most likely with reference to the Social Democratic post-war programme, *Denmark of the Future* (Socialdemokratiet, 1945), that there was, in these years, a broad interest in industrialising Denmark – also in the hosing area.

The interesting part of this understanding of the post-war efforts is however that industrialisation[8] *per se* (seen as an intentional large-scale mirroring of the structural developments in other sectors leading to concentration of production in the hands of private entrepreneurs etc.) was never seen as a neither a goal nor a means. The key word was rather rationalisation (*cf.* Indenrigsministeriet, 1945: 165; Socialdemokratiet, 1945: 19), which called for a broad and concerted effort by all parties – under the overall authority of the state.

To exemplify, in the rationalisation report from the Danish Institution of Civil Engineers permanent secretary in the Ministry of Housing, A. Skalts, writes:

> *"Under these circumstances [shortage of material and labour] the question of rationalisation of the building industry has been raised. Is it possible, though changed building methods or changed organisation of the building process, to attain savings in labour force and materials […] a considerable contribution to an improvement of the status of building has been achieved." (Dansk Ingeniørforening, 1951: 7; own translation)*

[8] Bertelsen (1997: 105) describes industrialisation as process of breaking down craft-based divisions and concentrating the production on factories.

Another example is found in Simonsen (1954: 5-8) who argues that the overall goal of rationalisation in construction, which he describes as an ambiguous concept, is to cheapen the overall building costs without compromising with the function and quality of the product. Any measure taken towards this goal can be seen as a rationalisation measure; however Simonsen warns against taking steps, which at first leads to cheaper solutions, but in the long-term have a detrimental effect.

Take as an example the provisions relating to recommended standard storey heights (280 cm) in apartment buildings introduced in 1949 by the Danish engineering association's rationalisation board, as mentioned previously. As the statutory clearance height at the same time had to be a minimum 250 cm, Simonsen argues that on particular projects it would be a rational solution to squeeze the gross story height down to e.g. 273 cm in order to save materials. However, the recommended standard storey height has to be maintained, as it opens up for the opportunity to standardise other parts of the building as well, e.g. pipes, installations, stairs etc. And only by conforming to particular standards is it possible to reap the whole benefits of rationalisation. It can thus be argued, that these provisions of 'the parts in relation to the whole' represents a re-articulation of the body-gesture correlation immanent to the exercise of discipline according to Foucault. This can also be seen in Jespersen's[9] discussion of the design phase in relation to the rationalisation effort, where he writes the following:

> *"Any building consists of a series of details, each one of which has to fit into the whole [and in order to achieve a sound economy] the design has to be adapted to the construction in such a way that a rational work operation can be maintained." (Jespersen, n.y.: 9; own translation).*

Simonsen (1954: 6) however also mentions that rationalisation efforts are not reserved to the notion of *non-traditional* building, i.e. concrete building. Rationalisation is also targeted at the traditional building process and not least the actual on-site work processes. Mechanisation seems to be the common denominator here, although Simonsen (1954: 7) argues that the use of mechanical materiel in itself is not a target. Rather, when dealing with the work processes, rationalisation enters as a concretisation of a technical-rationalist planning ideal. Thus, apart from efforts to promote standardisation, prefabrication of detail, and mechanisation,

[9] Although the publication is undated, evidence suggests that it is written for educational/information purposes in 1960 or 1961 as a part of the Danish Association of Contractor's activities to promote rationalisation efforts within the construction sector.

rationalisation in Simonsen's (1954: 7-8) understanding[10] also entails i.a.: a) establishing and complying with a construction programme; b) planning/designing the workplace through a meticulously composed plan of crew for the entire project duration; c) giving complete information to contractors and craftsmen prior to project start to avoid *guesswork*, thus eliminating delays due to incomplete information; d) implement uniform building laws and regulations nationwide; e) thorough education of every person involved in construction from the architect downwards.

Hence, where the rationalisation push in Danish construction might not have started as an effort to *industrialise* construction, and hardly evolved into applying industrial forms of *production*, it nevertheless took many of the methods and characteristics otherwise associated with industrial forms of *organisation*. Arctander[11] phrases it the following way:

> *"When things cheapen through industrial manufacturing, it is not necessarily due to things being made at a factory. The cheapening can first and foremost be attributed to the mechanisation of work and the organisation of production. Whilst the mechanisation is gaining foothold on the construction site, a similar development has not occurred with respect to the organisation of the construction process." (S.B.I., 1956: 3; own translation, original emphasises maintained).*

Thus, even though rationalisation in construction cannot be seen as an effort to mirror industrial mass-production by replicating entirely its forms of production (especially in the form of bringing the assembly line of the factory into play), it is nevertheless evident that the efforts eventually resembled the principles characteristic of industrialised manufacturing.

Temporality and the control of activity

If, judging by today's standards, pre-modern building resembled an *organism*, a suitable metaphor for the mould of the post-war efforts would be that of the *machine*. With the disciplines, Foucault (1991: 138) tells us, a policy of coercions, acting upon the body, was formed. This policy; this *machinery of power* defined how one may have a hold over others' bodies not only to make them do what one

[10] Simonsen (1954: 7) attributes his all-in-all 14 'commandments' for the construction sector to British architect Alfred Bossom, who spend his entire architectural career in the States, where he was specialised in the efficient construction of skyscrapers.
[11] Philip Arctander was the first director of the Danish Building Research Institute (S.B.I.) - a position he held from 1947 to 1968, where he took up the office of director and building coordinator for experimental constructions in Denmark.

wishes. But so they operate as one wishes, and with the techniques, speed and efficiency that one determines. One set of techniques emerging out of the disciplinary modality of the rationalisation efforts are concerned with temporal and spatial stratification.

Time is important for clients and craftsmen alike. From the clients perspective a shorter construction time reduces building loan interests whereas accelerated first occupation increases the return on investment. From the craftsmen's perspective, shorter project duration leads to a reduction in the net working capital. A reduction of project duration presupposes planning of the work in order to avoid *wasted time* and *waiting time* (S.B.I., 1961: 3). In the rational building process time-planning is crucial. The planning has to be established in several stages, and not only does the planning of the activity have to be considered, also the *planning of the planning* is of concern. As is written in the 1961 instruction from the Danish Building Research Institute:

> *"Better planning is the basis for all rationalisation – and planning is in itself the cheapest form of rationalisation. It requires no investments in expensive machines, only overview and foresight, something that can be learnt and developed methodically." (S.B.I., 1961: 2).*

Echoing Pedersen's (1995: 47) words it can be said that the scientific and theoretical interest in planning had changed from a question of legitimising its applicability, i.e. *why* to plan, to a technical discussion on *how* to plan.

Planning, normalising judgements and distributions

The technical-rational ideal planning process is constituted by a hierarchy of plans. We have: a) the overall time schedule (*da.* oversigtstidsplan); b) the outline work schedule (*da.* skitsearbejdsplan); c) the main work schedule (*da.* hovedarbejdsplan), and d) the detailed work schedules (*da.* detailarbejdsplaner).

The overall time schedule is developed by the client and the project supervisors and determines a series of due dates for the different stages of the building process – from the initial idea to the final acceptance of works. Within this frame the project supervisors establish the outline work schedule specifying start date, desirable project duration and due dates for the most important parts of the project – specifications to which the various competing bidders have to adhere. Together with the projects supervisors, the tenderers to whom the contracts are awarded then have to establish the main work plan and the detailed work plans, constituting respectively "*...the complete planning of work processes, manning and time consumption*"

(S.B.I., 1961: 5) and "…*the specification of smaller sections within the main work plan, e.g. in relation to work gang composition and the internal collaboration between work gangs*" (S.B.I., 1961: 5).

As for the establishment of the overall time schedule, it is argued that two different perspective can be applied. Either the project duration can be determined by specifying reasonable due dates for the various part of the process, or the desirable completion date can be used to dictate the various due dates within the frame (*Ibid.*, 1961: 7).

The condition of specification of *reasonable* due dates, can be seen as an articulation of Foucault's normalising judgement, introducing e.g. the constraint of a conformity to be achieved and the frontier of the abnormal. The outline work schedule thus builds on assumptions about 'average conditions', 'normal manning' and 'normal throughputs' – elements admittedly riddled with uncertainties, but nevertheless subject to normation. Reasonable time limits for some parts of the project have eventually become specified and legally sanctioned (*cf.* Bygge- og Boligstyrelsen, 1993b). The main work schedule can be established in detail, once the craftsmen have been appointed. The project supervisors assist the craftsmen in the planning process according to the following stages (S.B.I., 1961: 11-18). First a strict spatial partitioning: the building is divided into sections, where each section constitutes one part of the building, which is initiated and completed collectively. For each section of the building, work is then divided into separate operations, each of which constitutes a closed activity. The different activities must now be sequenced in consideration of their mutual inter-dependencies, and manpower is assigned based on the calculations and experience of the master artisans.

An ideal composition of work gangs can be established on-site, at it requires nothing but for the work gangs to work to the rhythm of 'the rational drum'; i.e. in the rhythm dictated by those who have been accorded the slowest tempo (S.B.I., 1961: 16). If work gangs work at different paces the result will be either waiting time or prolonged building time – none of which is desirable. The rational rhythm is determined by the work gang who, e.g. for structural reasons, is imposed with the slowest cyclic tempo; all other work gangs should be adapted to fit these circumstances in order to assure progress through regularity; as a chain of operations (*Ibid.*, 1961: 16).

To ensure this type of externally imposed regularity and demands for rhythmic performance of work, without it being mechanically determined and controlled as

Bahnsen (1954) argues is characteristic of industrial mass production, a type of supervision is needed, which differs from the domestic supervision of the master artisan present beside his workers and apprentice. The master artisan is no longer the determinant of the building process in all its facets, but has to adhere to the constraints of the instruments, materials and the rational planning ideal imposed by the client and his supervisors. Supervision increasingly became a special function running parallel to the production process throughout its entire length (Foucault, 1991: 174). I will examine this topic more in-depth in the following chapter on the functional stratification of the building sector, and for now focus on a few of the temporal consequences of this conformity to regularity.

The work schedule is an instrument, whose functioning requires continuous surveillance – a work which rests on the construction management, who are expected to provide the workers with an updated schedule. The schedule should be updated on a weekly basis; however with more regular intervals it should be controlled whether work has been commenced as planned. In case of deviations from the schedule, the construction management team should take initiative to make the necessary counter-arrangements (S.B.I., 1961: 21). The master artisan should be advised two weeks, and then again one week, in advance of up-coming work to ensure that he has taken the necessary precautions towards the punctual delivery of work. On the site meetings, the work schedule should constitute a permanent item on the agenda. Insofar as changes to the schedule are required, everybody should be notified immediately. Even though it is acknowledged that it *presumably* is impossible to completely prevent changes to the schedule any alterations should be avoided as further delays easily occur as result. The preferred method of dealing with delays is to take the remaining work under close scrutiny and by means of *renewed planning* make up for the lost time (S.B.I., 1961: 22).

The plan, I argue, had primacy over the practice, making control and adherence to the plan the central principle of sociality. Jespersen (1960) illustrates this accordingly with the following example of the function of historical cost calculation in construction projects:

> *"It is ever relevant to be able to follow the economic result of a specific project as closely as possible. Therefore you have to find control systems making it possible to establish any deviations from the planning so that corrective actions can be taken as soon as possible…" (Jespersen, 1960: 12; own translation).*

Clearly, the planning and its normative element of optimisation are seen as having primacy – if not over practice, then surely over the normal.

Rhythm, correspondence and coherence

Apart from what is explicitly formulated, the ideas embedded in this planning discourse draws on a number of assumptions of somewhat dubious character – when viewed from outside a technical-rationalist perspective. The planning ideal assumes a *linearity* in work-output, which parts with or ignores practical experience; i.e. that the parts can be deducted from the whole. An example: In the assignment of manpower it is argued that two different principles can be applied: man-days for each operation can determined either by 1) dividing the total workload with the expected labour output per man-day; or by 2) dividing the calculated total piece rate with the estimated profit per man per day. In either case, the principle can be illustrated accordingly:

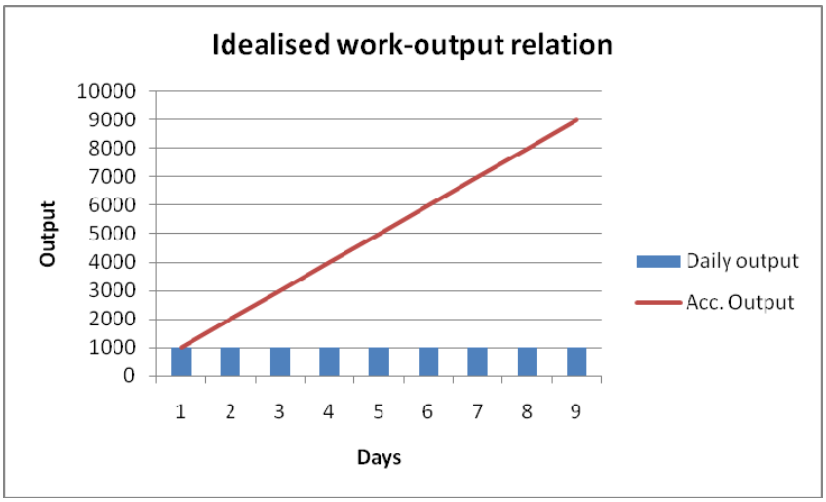


Figure 18. Idealised work-output relation

Thus, if a mason is to place 9.000 bricks in nine days, according to his negotiated piece rate, he will be able to place 1.000 bricks a day for nine days – whether in succession or dispersed over time. Accordingly, single contracts can be split, temporarily halted and then rearranged to accommodate for the general rhythm of the project. This view is in stark contrast to the conceptual notion of rhythm as expressed from a craftsman's perspective[12]. For craftsmen rhythm is important; it is

[12] The discussion of rhythm emerged as a recurring theme in the interviews and observations conducted as a part of the study. This will be examined more in detail in the third part of the dissertation.

however the rhythm immanent to the work itself. In terms of the relationship between work and output the following correlation is articulated:

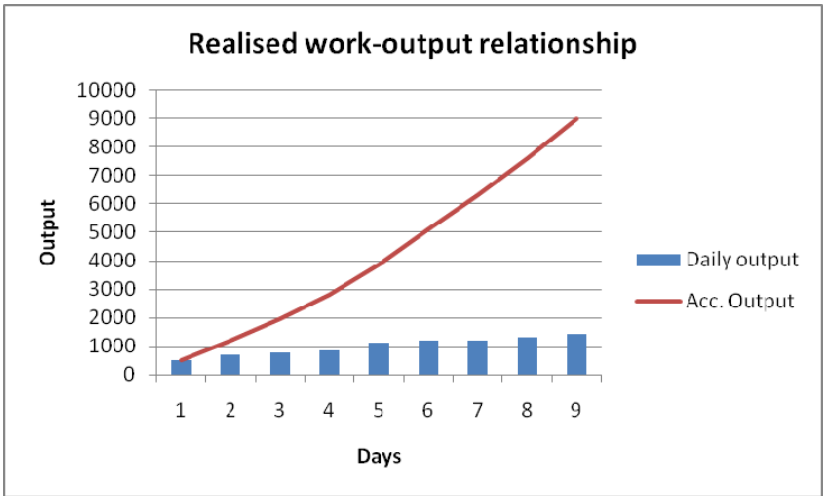


Figure 19. Realised work-output relation

In other words, the craftsmen acknowledge and calculate with momentum being gained throughout the process, if they can "*get into the rhythm of the work*." From a craftsman's perspective individual rhythm is seen as the precondition, not only for the sake of efficiency, but also in relation to the ability to innovate:

Rhythm (individual) → Steady cadence → Innovation[13]

This is the exact opposite relationship, or chain of causality, than envisioned and enacted in the 1950s construction policy where innovation efforts, in the form of means of rationalisation, prompts a steady cadence making it possible to induce a general rhythm in the overall project-processes:

Innovation (rationalisation) → Steady cadence → Rhythm (general)

This is why Banhsen (1954) rightfully can point to problematic of the piece rate system versus the traditional fixed schedules of wages, as they work from diametrically opposed rationalities. It is a coherence logic meeting a correspondence logic in the sense that the latter gives primacy to the plan and invests energy in ensuring that actions, the sociality, at all times correspond to the presupposed,

[13] This became a discussion topic at the workshop I report from in the third part of the book.

whereas the first argues that not until the rhythm has been found, when things cohere, is the basis for problematisation of normativity established – i.e. what is wanted and unwanted, what can be improved, etc.

Institutionalisation of temporal stratification

Temporal stratification in the form of the correspondence logic was instrumentalised and institutionalised further from the 1960s onwards. In 1968 the so-called fixed price/time circular (*da.* fast pris/tid cirkulæret) was introduced by the Ministry of Housing. Put short, this scheme dictated that all public or state subsidised building projects have to be completed within the frame of a *fixed agreed time* as well as to a *fixed agreed price*. According to the circular, fixed time implies the following three conditions (Håndværksrådet, 1991: 4):

1. A time schedule for the different contracts has to be established.
2. The tenders are not allowed to contain any provisos, which may influence the agreed fixed time.
3. The client's tender documents, as well as the subsequent works contract, must contain stipulations relating to claims and day-fines to be paid by the craftsmen in the case of self-induced delays.

As for fixed price this implies:

1. Works have to be conducted according to the bid offer price, and only in special circumstances on a time and materials basis.
2. Client and tenderer are not allowed to adjust the contract price for any part of the contract being delivered in the fixed price period (12 months).
3. The client is not allowed to accept provisos, which can influence the fixed price.

According to Gøth (1978) the establishment of the circular, which by 1978 is described as constituent for the contractual conditions also on the private market, have had the negative effects that wage expenses have become more difficult to predict due to increased *coordination problems* between the different work gangs (p. 74). At the same time Gøth argues that the increased demands for shorter construction time have made the gap between craftsmen and companies even larger, as the companies have been able to exert increased pressure on the craftsmen with reference to the circular as a mechanism of legitimisation.

Spatiality and precision

With the growing interest in, and demands for, determining price and time at the earliest possible time further disciplinary techniques/principles found their way into the building process.

Rational production principles and the ideal figure of the factory

In line with Bertelsen (2000) I argue that the ideal of rationalisation gradually turned into a problematic of precision. Bertelsen maintain that the new thing in contemporary building is that it is no longer based on craftsmanship but on system solutions, giving rise to new problems, e.g. because the very precise part-components lack tolerances, and we no longer have the craftsman's watchful eye to rely on to detect these inconsistencies. This might very well be the case – analysed from today's perspective. In the 1950s and 1960s the problem was another; the desired precision could not be attained by means of craftsmanship – rather it called for increasingly rational *production* principles:

> *"When it in the first place is a problem to control the building process, that is to determine in advance the qualities, time, and price of the building, it is first and foremost because buildings are produced under other forms than other products. The building sector has a different structure than other industrial branches […] The growing demands in relation to determining product, time, and price […] therefore emphasises the question of under which circumstances the building trades can learn from other trades' more rational production forms." (S.B.I., 1968: 6).*

Especially, the factory was increasingly seen as an ideal figure or example to follow in more than one way and repetition, prefabrication and industrial forms of management emerged as stepping stones in the sectoral development.

The process of medieval building and construction resembled a full-scale laboratory; an uncodified, open space, constituted as much by the performance of experiments (Turnbull, 1993: 321) as ex ante by a designer. Plans, dimensions, scales, etc. were by today's standards riddled by faults, inconsistencies and incongruities mostly due to the lack of common measurement systems. Nevertheless major buildings and constructions were erected successfully primarily by means of templates and practical knowledge of geometry as previously discussed. Plans, such as that for the construction of the Church of Saint Gall (*cf.* Horn and Born, 1966; Fernie, 1978), were used as exemplars for the layout and proportions of various parts of the building in relation to one another. They gave directions as to

the *whole* – leaving decisions concerning the *parts* in the capable hands of the craftsmen. This changed with the rationalisation efforts, as the planning of the specific parts became increasingly more important.

> *"Proper, fast and cheap work can only be conducted on a well-designed workplace. This is a condition long since determined and acknowledged in the factories." (S.B.I., 1956: 5).*

The above sentence is written in one of the first publications on the organisation of the building process conducted by the Danish Building Research Institute, the 1956 publication "Plan of the building site" (S.B.I., 1956). In making a conceptual link between mechanisation and the benefits of rationalisation it is suggested that the question of the site-design becomes increasingly important, whilst becoming less suitable to solve according to the 'handed-down' recipes based on the traditional building customs and practices. Through a more rigorous planning of the layout of the building site it is suggested that benefits similar to those of the industry can be gained: e.g. more efficient utilisation of materials and work hours and less material damage. A concern is also raised, being that it is more difficult to carry out the right design in practice in the building sector due to the uniqueness and limited temporal scope of a typical building project. Thus, it is not possible to develop and apply a standard site-design; however some general principles that can be followed with success are argued to exist (S.B.I., 1956: 6).

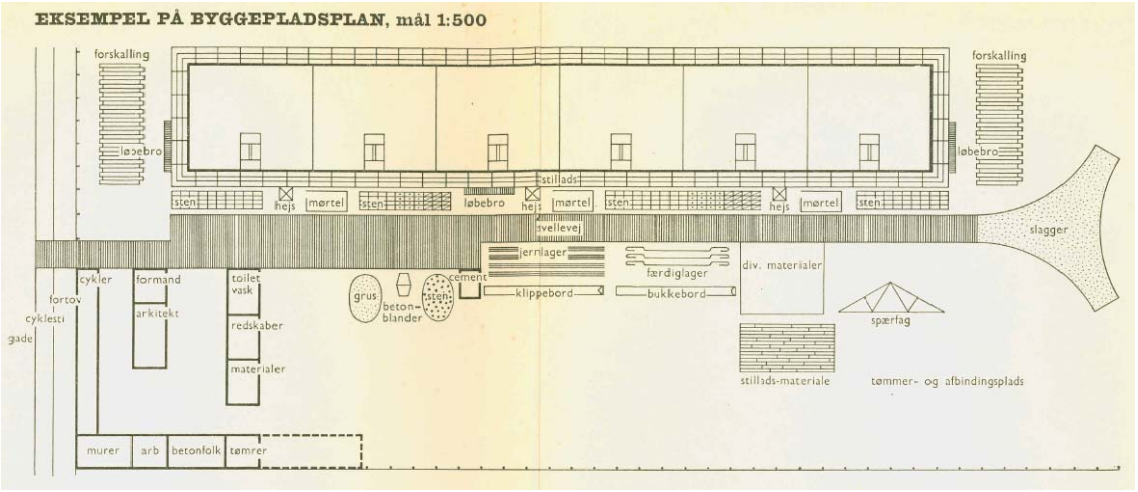


Figure 20. Example of a building site plan (S.B.I., 1956: 29).

The first principle that much be adhered to is to establish a plan of the building site, which has to display every device of relevance for the conduct of the work. The basic intention behind the plan is to facilitate the many different works, which have

to be conducted on-site, and it is therefore suggested that the plan has to be established in cooperation between master artisans, conductors, designers etc. The plan rests on two different types of factual data; 1) the general legal principles, and 2) the specific characteristics of the project. The different building authorities and trades organisations regulate certain aspects concerning the site layout such as sanitary conditions, fencing, scaffolding, etc. As for the specific characteristics of the project it is necessary to consider elements such as the time schedule, the exact manning, the material requirements, storage facilities etc.

The combination of increasingly heavier materials and the efforts towards structuring the site in the ideal of the factory introduced transport as a dominating problem of the modern building site (S.B.I., 1956: 8). Storage and transport of materials and building components on-site is thus space-consuming and leads to waste of both time and materials. Stocks have to be planned on basis of space consumption, quantities, weight, and sequence of use and deliveries have to be planned to arrive at the site just short of when they are needed. In relation to the on-site fabrication of components, frequently repeated works should be subjected to serial production and be organised in an on-site workshop.

Cranes – a structuring principle of construction

As in modern high-rise building projects, cranes were important tools in the building of large structures. Evidence suggest (Matthies, 1992) that a crane 'evolved' with the building during the course of construction as it continuously was dismantled and reassembled in new locations according to specific needs.

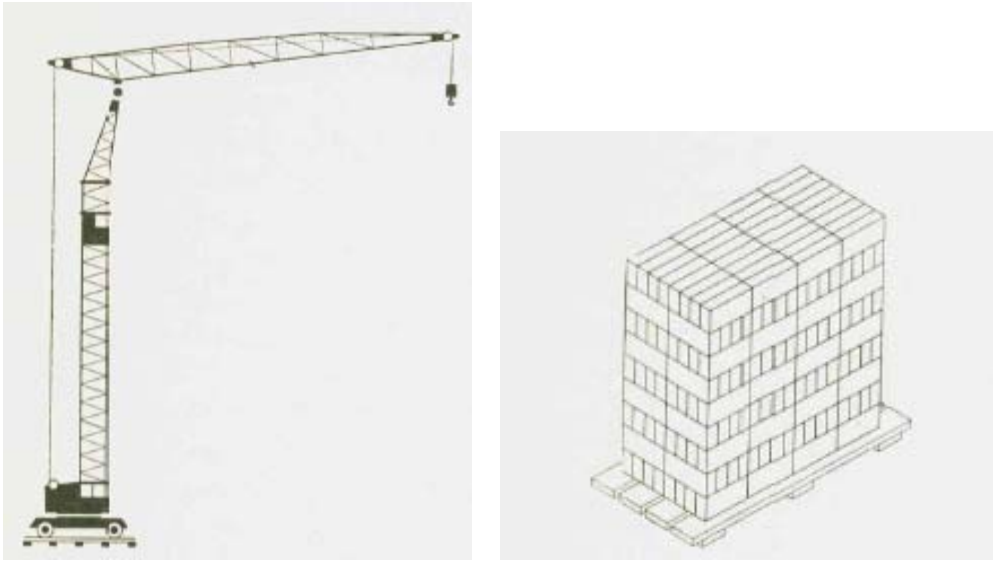


Figure 21. Bricks should be packed to accommodate for the crane's load carrying capacity (S.B.I., 1956: 13).

In contrast, when using cranes in a modern building project, a much more detailed planning than normally conducted is necessary (S.B.I., 1956: 13). First and foremost it has to be examined whether the use of a crane in the first place can be motivated, economically speaking. If so, in the following detailed planning a series of conditions must be considered in order to assure the most optimal resource utilisation:

– Actual loads must correspond to the crane's load carrying capacity.
– The on-site manning has to be adjusted to the capacity of the crane.
– Stocks are to be placed along the crane tracks to ensure the least possible movement of the crane.

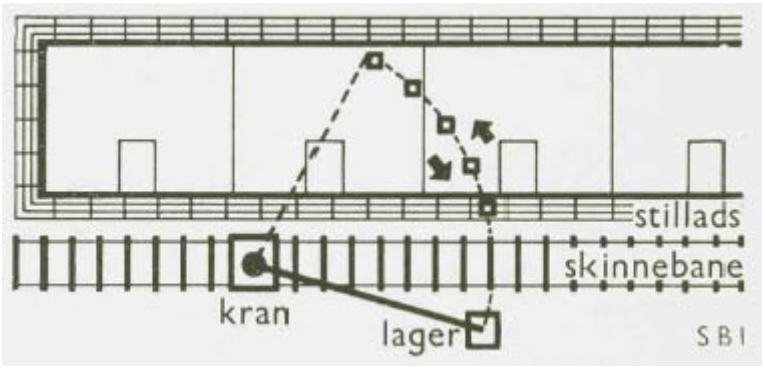


Figure 22. The crane is best utilised when placed in one location and hoists its load without moving on the track (S.B.I., 1956: 13).

Thus, rather than having the particularities of the emerging building and the on-going work dictate the form, function and placing of the crane, the crane is now re-articulated as a structuring principle both for the building as well as for the building process. Lundberg (1954: 49) thus argues that the introduction of the crane in many ways changed the work processes, not only in relation to the direct concrete work, i.e. assembly of precast elements, but also in relation to the steel reinforcement as well as the shuttering work. Citing an example from the construction of the so-called *'Telephone House'* in Copenhagen Lundberg argues that the use of cranes led to the destabilisation of the existing price currents, which then had to be re-established by arbitration (based on data from time studies) rather than by negotiation. The use of cranes, indeed the collective mechanisation attempts, was seen having such an impact on the fundamentals of building that it was backed by the establishment of the so-called Construction Sector's Machinery Pool (BMS, *Byggeriets Maskin Stationer A/S*) September 3rd 1953 with funding from the aforementioned Marshall Plan – a state owned enterprise promoting the use of mechanised production methods.

Superimposing building customs

By the 1960s the concept of repetition and standardisation had evolved from unpleasant consequences or characteristics of the mass production system in general to *the* central elements of rational organised building activity. And it was not only repetition but the systematic exploitation of repetition, which was seen as *leitmotif* of the efforts (SBI, 1968: 10). The rationalisation efforts in guise of repetition can be seen as a re-articulation or mimicking of the notion of *building customs and practices* as discussed previously, thus:

> *"In much of the best older architecture […] repetition is a fundamental attribute having ordered not only the structure and the production but also the basic architectural properties. Also a modern building culture can be based on repetition." (SBI, 1968: 10; own translation).*

Repetition could and should be imposed on all levels and across all spheres of the construction industry as an all-pervading principle of sociality. A repetition not only of operations and architecture, but also of dimensions, materials, building parts, connections/joints as well as of financing and contractual relationships. In other words, what we are facing is a systemic attempt to superimpose a new building custom embracing systematisation and technical expertise rather than previous time's skills as the economy of the process.

The reason for putting it this way, i.e. stressing the substitution of skills for expertise, is that the divide between time-honoured, context-dependent knowledge (*techne*) and scientific knowledge (*episteme*) inarguably grew deeper these years. Herløw and Thøgern (1961) thus note the following:

> *"The previous year's development has in both a harmful and meaningless fashion increased the distance between the technician and the artist. While these two were typically unified in the time of the traditional craft, technicians and artists today consider themselves as opposites. They meet with distrust and often believe that will only mutually hinder the work of each other. This – of course to great harm for their mutual product – and hence the user." (Herløw and Thøgern, 1961: 13; own translation)*

Why is it so one could ask? I could point to several occasions at the present time; however I have chosen to focus on two aspects of the influence of the materiality of the technical-rationalist planning discourse.

Modular systems and the knowledgeable designer

With the rational production methods and the use of mechanised tools, measuring and measurement became increasingly more important. As an example of the aforementioned problematic of precision, Hansen (1954: 78-79; own translation) explains:

> *"Due to the increased industrialisation, the precision of the staking and measuring methods becomes a progressively more important issue. As houses no longer are manufactured through craft methods by use of on on-site measuring techniques, but is delivered from factories to be assembled on-site, it is manifestly evident that measures and dimensions are correct."*

Hansen follows this statement with an outright astonishment over traditional practices of measuring, arguing that it shameful to have to accept tolerances in the range of 30 - 60 mm with the derivative difficulties this may lead to in the process of fitting fixtures and installations:

> *"By applying modern measurement methods and meticulous planning it should however be possible to avoid the partial demolition of the buildings in order to fit the installations." (Hansen, 1954: 79).*

Thus, the solutions to the problems encountered by use of new types of materials are better planning and modern measurement methods, and what better way is there than to combine these two in an attempt to construct a singular, unidirectional system for the elimination of contingencies on-site?

In 1958 the Committee for Building Standardisation (*Komitteen for byggestandardisering, KBS*) released the Danish Standard 1010 on 'Modular Agreement for the Building Industry' (KBS, 1958) laying down the principles for the establishment of a national system for the coordination of measurements in buildings and building elements. The module scheme or agreement was instigated as part of the efforts to rationalise and cheapen the building production by making possible a rational measurement-standardisation of building elements enabling industrial fabrication of these. Further intended benefits were (KBS, 1958: 3):

– To limit the number of variants of building elements.
– To simplify on-site work.
– To make possible rational measurements.
– To simplify the planning of work.
– to improve collaboration between designers, manufacturers, retailers, clients and contractors.

It is however important to notice that standardisation *per se* in building was not a new thing. As noted above, even in traditional building standardisation played a prominent role. This however was a standardisation, which was deeply rooted in the traditional types of materials. Take for instance the 12 cm brick (*cf.* Moduludvalget, 1960: 12), which had *de facto* dominated Danish building up until the Second World War. As Malmstrøm (1954) notes it is however not *standardisation*, rather the establishment of a so-called *preference measure*, which is the objective of the efforts. In order to understand this distinction, we have to venture into a game of definitions:

> *"…standardisation is a covenant concerning the individual building elements' detail layout and potential placing, subsequent to a modular – or preference measure consideration – has determined the main outline to which the element must conform […] it is absurd to negotiate on a series of details ('standardisation') as long as the principle lines ('preference measures') are yet to be determined." (Malmstrøm, 1954: 9; own translation).*

Thus instead of 'just' standardising certain elements, it is the principle system that is of interest and relevance for rationalisation. This principle system is according to the Committee for Building Standardisation (KBS, 1958: 20) characterised by being based on a number having "*numerically better qualities*" than other numbers – a property, which according to Malmstrøm (1954: 9) can be explored by use of two exact sciences: mathematics and physics.

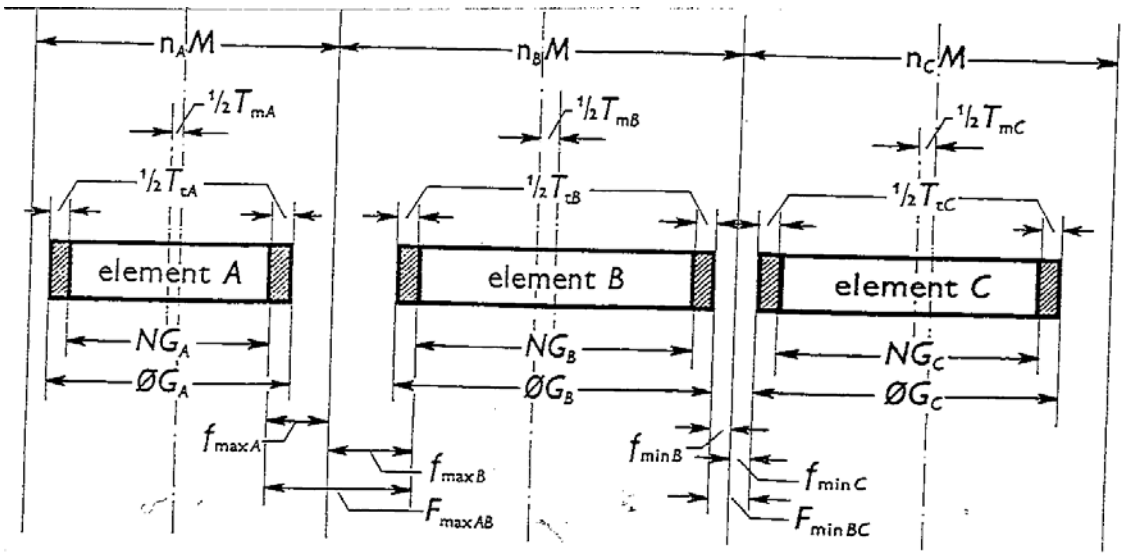


Figure 23. Example on a series of assembled modular elements (KBS, 1958: 11).

Arguing that traditional standard measures (and thus the architectural properties) to great extent are a more or less haphazard manifestation of the craft based nature of

production, Malmstrøm (1954: 10; see also KBS, 1958: 12) asks whether we today have found the architectural style, which expresses the structural options made possible by the new types of materials – most prominently concrete. Not answering this question directly, it is nevertheless apparent that according to Malmstrøm the material given informs not only the type of building but also the very production of buildings due to the totalising function of the preference measure. At the same time, a sharp divide is inserted between the normal and the abnormal. Normality is defined by conformity to the normative principle of system, whereas everything not being stratified; not adhering to the principle of the modular grid (*modulnettet*) is made subject of investigation, in that it has to be established how non-modularised building parts can be used in the transition period, which is inevitable until the modular principles have penetrated the sector absolutely (KBS, 1958: 26).

Returning to the intended benefits of the modular system, it is now clear that the simplification of planning and on-site work should come about by reducing the element of contingency and eliminating the possibilities of making 'unfit' part-solutions, hence improving collaboration between designers, manufacturers, retailers, clients and contractors. In other words, if actors are restricted to act only within the narrowly defined borders of the modular grid, one individual cannot create something which lies outside the scope of others. Better collaboration is seen as being brought about by the coordinative force of the modular grids rather than through mutual reciprocity. This is clearly seen as restrictions to the freedom of the individual; however:

> *"…this restriction of freedom of choice is in practice of subordinate concern compared to the technical, financial and social benefits, which are attained instead." (KBS, 1958: 15)*

Furthermore, and perhaps most important, with standardisation and the modular grid as tools, the projects designers (engineers and architects) can be dedicated to their *proper* tasks: planning and design. Thus, the designer is constituted as knowledgeable and responsible for the planning of the process, as a result of the *scientification* of the mundane, i.e. the materials. Below, I discuss from another direction, how the craftsman on the other hand is deprived his status as knowledgeable of reasons much the same.

The juridico-discursive constitution of the unknowledgeable craftsman

By the 1960s public subsidy for housing was no new idea. As early as March 29th 1887 (Indenrigsministeriet, 1945: 113) the first law was passed making it possible to

provide government loans to local authorities or associations for the building of good and healthy council houses. July 3rd 1916 saw a law aimed at furthering the completion of residential building by giving 10 year real tax holiday, and in the years from 1917 to 1921 a total of DKK 55 million in public funds was made available for residential housing. Eventually, the government's direct loans undertaking was replaced by an indirect funding scheme through the so-called State Housing Foundation (*Statens Boligfond*), which was in operation until 1927 (Indenrigsministeriet, 1945: 114-118). With the discontinuance of this foundation, the governmental support to public housing was also abolished until 1933 where direct loan undertaking was re-introduced – once again aimed at the underprivileged. This law was followed up with a series of new and supplementary laws in the following years; however we have to proceed to 1946/1947 to find an event in the public subsidy housing scheme, which was not confined to dealing with strictly financial and philanthropic concerns. April 30th 1946 law no. 235 concerning building with public subsidy (Indenrigsministeriet, 1946: 723-737) was released, stipulating demands in accordance with which public subsidy for building could be given. Whilst not giving any direct recommendations and demands in relation to specific procurement methods or technical production methods, this law nevertheless paved the road for the following year's *Elementhuslov* (law no. 117 of April 26th 1947), which gave preferential treatment to the financing of buildings erected with *special* building methods later rephrased, with the 1953 circular on so-called *un-traditional* building (Indenrigs- og boligministeriet, 1953; Kjeldsen, 1954: 70-72), as concrete building methods. This circular (called the *mason-circular*) created a sharp divide between the skilled and the unskilled by stipulating that a maximum of 15 pct. of the skilled labour (masons) that would normally be used in the building of a traditional house. This was further followed by a ministerial circular from March 30th 1960 (the so-called *assembly-circular*) channelling public subsidy into un-traditional building, guaranteeing the building of 7,500 homes over the following four years. Although not stipulating directly that traditional building materials (most notably bricks) should be substituted for new types of materials, what happened was that the use of bricks indeed was abandoned for concrete (Kjeldsen, 1961: 7) and other materials of experimental nature. Thus, the Ministry of Housing's conditions the approval of a building as un-traditional only contains the following clauses: 1) that the building is conducted without the use of skilled masons, and the design of a new building must take this requirement into consideration. Insofar the use of

skilled masons cannot be completely avoided for financial or technical reasons; the use should be restricted to the aforementioned maximum of 15 pct.; 2) that the chosen structures, work methods, materials, etc. have to be coordinated closely with the plan arrangement; 3) that the total craftsman wages must not exceed that of the traditional building (Kjeldsen, 1954: 72). With these stipulations we are at the core of the argument proposed above with reference to Herløw and Thøgern. Rather than being able to rely on the: "…*gradual clarification, which age-long human experience has precipitated in the traditional materials*" (Herløw and Thøgern, 1961: 13 own translation), the laboratories, the drawing offices and the studios became the loci of legitimate agency; no longer could the skilled craftsman fully grasp neither the material aspects nor the derivative complexity of the building process. In addition, he was deprived his traditional legitimate role in the construction sector by means of *juridico-discursive* sanctions. This development; this materialisation of the discourse of rationalisation contributed to the constitution of the technicians, i.e. the architects, engineers and contractor as the pivotal points in the modern construction sector – the architects and engineers because of their technical knowledge concerning the design and fabrication of new types of material, and the contractors to large extent because of their ownership of production machinery (Kjeldsen, 1961) facilitated by the *BMS*.

The diagrammatic of the phase model and the primacy of the norm

Above I have examined the formation and actualisations of the dispositive of rationalisation in Danish construction, which I propose, can also be seen as an *assemblage of specific social events* on the one hand and *programmes* on the other. This calls for an explanation, which is provided by Jensen (2005a: 35-37) who argues that Foucault's dispositive analysis can be seen as an interplay of three levels being a) specific social events; b) programmes for the events; and c) diagrams as ideals. Between the specific shaping of the social and the diagram, we have the programmes, constituting specific ideals for how to manifest the diagram. Where I have discussed specific social events as well as the shaping or constitution hereof I am yet to discuss the diagram of the dispositive of rationalisation, which will be the issue in this chapter, where I will attempt to weave together the different arguments in what can be seen as a summary and transition to the following discussion of partnering.

Panopticon and discipline

At a general societal level, Foucault (1991: 171, 200-206) describes the military camp as the diagram of visible observation, and the *Panopticon* as the diagram of discipline. In 'The eye of Power" Foucault (1980: 146) argues that he in his study of hospital architecture in the second half of the eighteenth century, and of how the medical gaze was institutionalized, how it was effectively inscribed in social space, how the new form of the hospital was at once the effect and support of a new type of gaze, almost stumbled over Bentham's 'device' the *Panopticon* as a result of his studies of the problems of the penal system:

> *"There was scarcely a text or a proposal about the prisons which didn't mention Bentham's 'device' – the 'Panopticon'." (Foucault, 1980: 147).*

Although never, neither fully nor partly, realised in its own time, Foucault nevertheless argues that this devise of Bentham's, with the very word *Panopticon* seeming crucial here as the designation of the principle of a system (Foucault, 1980: 148), emerged as a technology of power designed to solve the problems of surveillance throughout the different spheres of society – as a principle of re-organisation. According to Foucault (1980: 148) Bentham himself proclaimed that his "*optical system was the great innovation needed for the easy and effective exercise of power.*"

Foucault argues that the *Panopticon* is *polyvalent* in its applications; it is a laboratory, a machine used to carry out experiments, to alter behaviour, to train or correct individuals:

> *"It is a type of location of bodies in space, of distribution of individuals in relation to one another, of hierarchical organization, of disposition of centres and channels of power, of definition of the instruments and modes of intervention of power, which can be implemented in hospitals, workshops, schools, prisons." (Foucault, 1991: 205).*

The phase model as the diagram of rationalisation

Much the same way, albeit in a more modest version, I argue that the principle of rationalisation was institutionalised or effectively inscribed in the social space of the construction sector in the form of the so-called *phase model*[14], which emerged as *the* great innovation needed for the unequivocal and effective production of projects – and thus exercise of power. Just as with the *Panopticon*, the phase-model has never

[14] The phase model was introduced by the association of engineers and the architect's association in a white paper (FRI & PAR, 1968) in September 1968 as a response to the Ministry of Housing's fixed price/time circular.

been realised in full in the construction sector; nevertheless I argue it constitutes the very ideal figure of a political technology directed towards the ideal norm of rationalisation, embodying the totality of means and measures discussed above. Let us first observe the phase-model as it is typically represented:

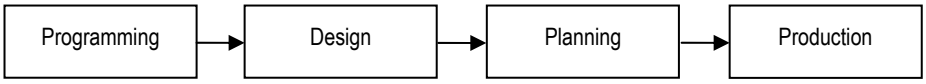


Figure 24. The idealised phase-model

This representation, which we could call the idealised phase-model, differs from the actual realised process, which could be represented as follows:

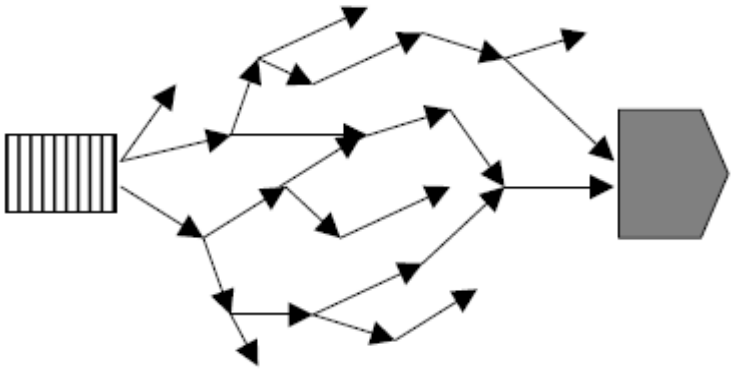


Figure 25. The normally realised process (LINK, 2002: 11).

Differences aside, the idealised phase-model bears an ideal norm towards which the social actors of the construction sector are directed, and to which they have to relate. The idealised phase-model is made possible by the stratification of time and space, with its scientific and statutory sanctioning, and is furthermore an ideal technology of power designed to solve the problems of coordination, which had emerged as a consequence of the increasingly more complex (and fragile) sociality. Thus, as each individual part had been made subject to the gaze of rationalisation and optimisation, the interconnections became increasingly important. In the logic of the phase-model total unambiguity and control could be maintained at the same time as specific obligations could be placed at the different individual actors who had the formal qualifications and competencies to solve a specific bounded task. The key issue in the phase-model is that of management.

One management, one unified responsibility

Where the principle of individual trade contracting traditionally had been the preferred form of organisation in the construction sector, the post-war years saw the

rise of a series of problematisations hereof and the efforts to constitute general contracting as the preferred system. The hitherto dominating system, which had its roots in the crafts-based methods, was seen as a hindrance towards capitalising on the opportunities which had been provided by the types of material and machinery:

> *"If collective agreements can be changed in such a way that the organisation of the building industry unobstructed can break new paths, is it in the opinion of the majority plausible to find new forms [of organisation], which by use of new machinery and work processes can maintain the valuable in Danish building." (Dansk Ingeniørforening, 1951: 43).*

The general contracting system was seen as such a new form of organisation, whose main contribution would be an aspired unity management, whose implementation could contribute to the complete safeguarding of the working procedures for the main contractor (Dansk Ingeniørforening, 1951: 111). This safeguarding of working procedures however comes at a price: the obligation towards the others. Thus, insofar as one contractor would fail to fulfil his contractual obligations, in the individual trade contracting system the client would carry the responsibility towards the remainder of the contractors. In the general contracting system, this (legal) responsibility would be: "…*placed at the building industry's own people. This in itself would probably contribute a great deal [towards the rationalisation efforts]*" (Ibid., 1951: 111; own translation).

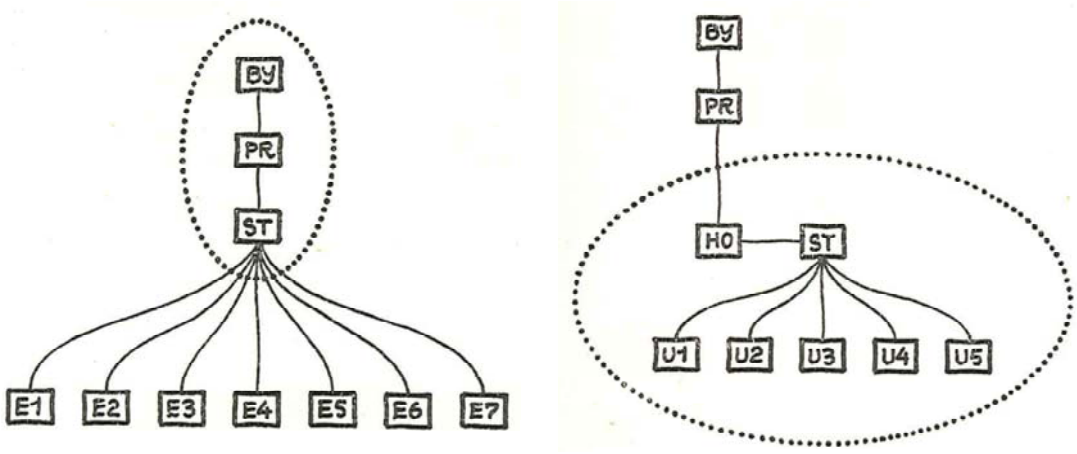


Figure 26. From individual trade contracting (left) to general contracting (S.B.I., 1968: 14-15).

What we see above is in essence an attempt to shift the obligation of management and control (the broken line) from the client ('BY') to the main contractor ('HO') who is given the "…*complete management responsibility*" (S.B.I., 1968: 13; own translation) in the production phase. Much the same way we see the attempt at a shift towards the uni-directional and unequivocal in the rest of the phases of

building process, where the architects and engineers (the project supervisors) are constituted as individually responsible actors for their own limited part of the project. Whereas the project supervisor traditionally speaking have been considered the client's representative or *shop steward* also in legal terms (cf. ABR75: 1978: §1.1.1), the technical development and the increased complexity (interconnectedness) made the architects and engineers inspired by the general conditions for works and supplies, which regulated the relationship between the client and the contractor. An especially important issue in the General Conditions for Consulting Services, which was instigated in 1975, is that of responsibility for supervision. As Salling (1981) writes, the question of supervision has always been rather problematic due to the following dilemma: On the one hand the consultant is obligated to control the contractor's work; however on the other hand this control is effectively only a spot/sampling test and in addition the contractor has to validate his own work. The ABR75 however contractually exempts the consultant from part of this obligation, thus circumscribing and limiting the consultant's responsibility as well as turning possible actionable acts into client-risks, as the client cf. the *culpa*-rule[15] has to accept the risk for any damages/faults etc. caused by conditions not commonly known within the professional community. Returning to the notion of the phase-model as the principle of a system, the question to which it provides an answer is that of how to circumvent the avoidance of responsibilities, which follows from the situation of being dependent on the work of others without at the same time having influence hereon – a situation which is argued to be the consequence of a craft-style based form of organisation (S.B.I., 1968: 12).

Focusing on the building sector as a whole, the phase-model emerges as an individualising subjugating technology, telling each one of the individual actors how to conduct themselves and what they are responsible for. Furthermore, the phase-model as an ideal political technology for functional differentiation renders obsolete the need for multilateral coordination; everything is defined, specified and prescribed exactly with the plan as the only point of coordination. Due to the normative status of the plan and the sectoral stratification, the site meeting (to

[15] Also called the fault liability rule, according to which: "*…the tortfeasor/contractor will be liable in damages where the act or omission in question may be attributed to him as negligent or intentional. Under the traditional culpa definition a tortfeasor/contractor commits the tort of negligence if he fails to show the degree of care and consideration, which a reasonable, prudent man (a bonus pater familias) would show in similar circumstances.*" (Peytz et al., 2004: 6).

mention but one example[16]) lost its status and role in the building sector. Kreiner (1976: 180) argues that *de jure* the site meeting has no function to fill and for good reason, as there ideally speaking is no specific need for meeting face-to-face in order to coordinate actions, as the plan fulfils this function. The site meeting is ill-conceived and as a very specific actualisation of 'traditional' organisational and managerial order. The site meeting can be seen as a negotiation game between the different actors of the project – a social event which has no place in a sector stratified and specialised in accordance with a rational norm. If the site meeting, being a consequence of the individual contracting system, could be abolished much could be gained (Dansk Ingeniørforening, 1951: 102). Thus, if new contracting systems could be employed:

> *"Work management would become more rational than if several different companies' representatives had to manage each own work group. The Danish site meetings probably steal much time not being utilised very efficiently." (Dansk Ingeniørforening, 1951: 113; own translation).*

The site meeting is in other words not only unwanted but also unnecessary because of the normative status of the plan and the general uni-directionality of the sector as is disposed by the logics of the phase-model. As the plan has primacy and each and every actor his or her place in the social order of the project the crucial concern is to ensure *correspondence* (*cf.* Clegg, 2002) In the next chapter, I discuss how this politico-technical rationalisation dispositive have been challenged, and how partnering has emerged as a response to the phase-model.

[16] Choosing the site meeting as an example has not been done at random. The site meeting and its role and function will be further discussed in the third part of the dissertation.

7. Negotiated practices and the collaborative turn

Out of the instrumentalisation of the notion of rationalisation a new form of governance emerged in construction; a rationality of what we could call negotiated practices (Raffnsøe, 2003).

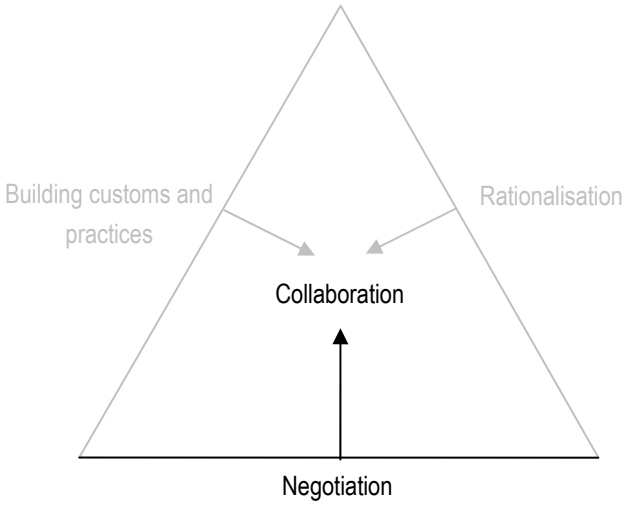


Figure 27. The analytical focus of the chapter

Many reasons for this development can be proposed; however I would like to point to two conditions in particular. One being *immanent* to the existing dispositives, the other externally conditioned.

7.1 Development programmes, productivity and integration

Simonsen (2007: 105) argues that from the years 1991-1993 and onwards the *building process* became the centre of attention in the construction sector as a series of development programmes, with the productivity analysis '*Synergies and barriers in building – on the lost productivity's trail*' (F.R.I., 1993) as the cornerstone, gradually gained foothold in the sector. I do not fully agree with this reading, neither in terms of when this development took place, nor – and perhaps more importantly – what the 'discourse concept' (domain of associated statements) of this turn was. Thus, where I argue that the process by and large was *the* main leitmotif of the rationalisation efforts of the 1940s to 1960s, the contemporary *collaborative turn*

rather problematises the basic understanding of the rationalised process and can be seen as an attempt to constitute a space for negotiated practices by means of establishing a series of exemplars and best practices to follow, rather than imposing a uniform system of optimisation.

Thus, where the disciplinary system with its technical-rationalist instruments had been effective in relation to reproducing standard elements, designating unambiguous areas of responsibilities and exploiting the potential of repetition, a series of so-called *production hostile factors* (S.B.I., 1968: 58-62) increasingly challenged this system, and called for another dispositive more capable of not only incorporating but also utilising contingencies; a system not focused on the process in the form of the next action and in ensuring correspondence between plan and reality; a system instead focusing on the particular and the situation. These production hostile factors included e.g. a) uncertainties relating to start dates due to administrative conditions, b) program changes and project changes; c) project defects or errors; d) labour force and material shortage; and e) other contractors' delays.

As for the externally conditioned factors, an increased decentralisation, expansion and dilution took place in the construction sector. Speaking of decentralisation, Bang *et al.* (2001: 155) from a macro-economic perspective argue for the following development from an expansive, Keynesian economy (a cornerstone in the Marshall plan) to a contractive, neo-liberal economy.

Table 9. Background conditions for public policy instruments (Bang et al., 2001: 155).

1950-1973	**1973-mid 1990s**
— Expansive economy (continuous growth periods)	— Contractive economy (frequent crises)
— Keynesianism, subvention economy	— Neo-liberalism, market as driving force
— Active, radical state intervention	— Re-active, adaptive state intervention
— National regulation frameworks	— National deregulation, globalisation
— Scarcity of skilled manpower resources	— Scarcity of natural resources
— Fulfilment of basic social and material needs	— Fulfilment of spiritual demands
— Industrialisation as mass production	— Consumer oriented production, service society
— Collectivism, conformity	— Individualism, flexibility

Laid out as steering relations, the above periodisations can be illustrated as a shift from government to governance, rather than as a shift from a top-down to bottom-up approach as suggested by Bang *et al.* (2001:156).

Table 10. Steering relations and governance traditions (From Andersen and Thygesen, 2004: 11; own translation).

Tradition	Steering relation	Gaze	Steering conception
Government	A → B	Regulation	Elimination of resistance
Governance	A ← B	Network/adaptation	Attachment and conditions for attachment

What this implies is a shift form the classical political science perception of power (that it is something to be held (by **A**) and exerted over others (**B**) in order to eliminate resistance) to an understanding that steering (and thus the exercise of power) can only be considered successful insofar as the object (**B**) of regulation willingly relates to the conditions for the exercise of power.

Thygesen and Andersen (2007: 328-330) argue that 'government' comprises the tradition of present political science and administrative law, in which the steering aspect of technologies: "…*draws upon the predictability of the calculus*", the effect of steering technologies: "…*is expected to manifest either as a consolidation or an improvement of the chains of control*" and the challenge of management: "…*has been construed as a matter of prediction and control.*" In contrast 'governance' aims to observe: "…*the processes out of which the uniting structure of a network emerges*" and when it comes to the function of steering technologies: "…*they are considered to be an important contribution to the social shaping and dynamics of networks as opposed to predictability and control.*" In this perspective the management is: "…*presumed to be a matter of mobilization through enrolment and interessement.*"

Thus, rather than coercion, regulation becomes a question of integration and network formation, and where the proposed 1950s and 1960s solutions to avoiding the above mentioned production hostile factors took the form of sanctions, i.e. fines which were seen as disciplinary measures taken towards the contractors (e.g. S.B.I., 1968: 61-62), the recent sector development initiatives launched in the years covered by this chapter instead focused more on conditioning the possibilities for *attachment*. One possible reason for this change is that more and more legitimate actors joined the project, leading to a wider scope of authorities of delimitation. Several groups/networks are established each of which claiming voice and responsibility for different aspects of the construction process. The sector became much more complex than in the immediate post-war context. Rather than a single dominating problematisation, multiple perspectives are voiced, and all had to be heard.

With Raffnsøe's (2003: 16-20) words, the development can be seen as a shift from a governance frame (government), which subjects us to "…*particular limitations*

which constitute a process of learning in which our lives become directed towards a not yet realized regulative or ideal norm" to a governance frame (governance) based on a practice of negotiations, in which the participants: "…*constantly seek to advance a range of diverging values and standards of action; and only within the negotiation game is the question of the proper division and connection among them answered.*"

Clegg et al. (2002: 324-325) argue that we see a shift from a correspondence model to a coherence model; that we go from an expectation of delivering a final project which corresponds to the project design, to an attempt of making:

> *"…existing conflicting modes of rationality redundant by delivering economies in authoritative surveillance through building a collaborative commitment and transparency into the moral fibre of a project." Clegg et al. (2002: 325; emphasis added).*

Between figures and counter-figures

The phase-model was inscribed as the all encompassing guiding effect and enabler of the post-war institutionalisation of the gaze of rationalisation. Ironically, almost every political development initiative since the formulation of the Danish Building Development Council (da. *Byggeriets Udviklingsråd, BUR*) in 1971 has aimed at overcoming the shortcomings of this model, notably the dependency of a concerted, general coordination of activities.

Conceptions of productivity increasingly changed from encompassing rationalisation in the first instance with (technical) quality as its derivative

Productivity → Rationalisation → Quality,

to applying an integrative, symmetrical perspective of the form:

Rationalisation → Productivity ← Quality,

where quality furthermore was considered in a much wider perspective than from a production technical perception alone.

Bonke and Levring (1996: 11) thus argue that during the 1980s extensive studies revealed both basic technical faults as well as severe managerial malfunctions in the *industrialised* building process. This coupled with a strongly rising number of defects in buildings of only 15 - 25 years of age led to an increased focus on the measures being taken to assure a sufficient level of quality in construction – the process of the

Quality Assurance and Liability Reform (da. *Kvalitetssikringsreformen*), which was put into operation by the Ministry of Housing in 1986. The philosophy of the reform, as described by Bonke and Levring (1996: 11), is:

> *"…to urge the actors of the building process to identify the optimal balance between the total cost for the project, the management cost and the cost of correcting defects. It is widely accepted that the construction process during the previous period had developed into a position far from this point of cost optimisation."*

The reform, which has later been included in the 1992-version of the general conditions for building works consists of a wide spectrum of instruments, e.g. (Bonke and Levring, 1996: 11):

– New procedures for design and execution.
– Formal procedures for the documentation of quality in design and execution.
– Unification of periods of liability for all parties involved in the project.
– The establishment of the Building Defects Fund (da. *Byggeskadefonden*).
– Manuals for care and maintenance.
– 5-years inspection.

This quality assurance and liability reform can be seen as a concretisation of a new ideal conception or problematisation of productivity, which had emerged from the 1970s onwards together with the formation of the Danish Building Development Council (da. *Byggeriets Udviklingsråd, BUR*) in 1971. BUR was formally established by Law no. 229 of May 19th 1971 on the furtherance of the development of building. The council was commissioned to promote provisions working towards increasing productivity and the quality of the built environment as well as the international competitiveness of the sector (S.A., 1991: 1892). The Danish Building Development Council was eventually abolished by Law no. 314 of May 22nd 2002 as a part of the government's decision to reorganise its portfolio of councils, boards, etc. (OEM, 2001/2: LF 120); however it succeeded in affecting the conditions of the sector – not least in the later years by means of a series of debates and discussion papers re-articulating the discussions of the 1950s and 1960s and taking the notion of the 'traditional' as its counter-figure.

Most notably, BUR in 1990 published a report entitled '*The resource consumption and distribution in building*' (BUR, 1990), in which the resource expenditure in a 1986 housing project was compared to that of a 1969 housing project. The report

concluded that the time consumption had almost doubled by 1986 and even though building had become more complex something must be wrong with the way the process was organised. This report together with the so-called *Double-Up* debate (*cf.* F.R.I., 1990) launched a series of development programmes, which in various forms over the following years all tried to re-articulate the problems and needs of the construction sector by proposing various 'packages' of solutions, to which a wide variety of different actors and institutions could relate to. In fact this development already was legislatively sanctioned with the establishment of the 1989 development quota from the Ministry of Housing, in which a part of the government's social housing scheme was reserved for experimental projects where the industry participants according to Bertelsen and Nielsen (1999: 2) should play a major role to ensure the use of the results in their future building projects. Two of the projects (Building Logistics and ECO-House) were to become a major part of the basis for the later PPB-programme (*Ibid.*, 1999: 3). Below I will analyse this re-orientation or re-conceptualisation of the construction policy and its proposed solutions.

7.2 Re-strategising the problem of productivity

As previously mentioned, in 1990 The Danish Building Development Council in 1990 (BUR, 1990) released a report on the productivity of the Danish construction sector. In this report, which played an integral part in the following year's debate on the problems of the sector, it was documented that the resource consumption in the construction of a housing project had almost doubled from 1969 to 1986. Based on the figures it was concluded that although the construction process had drastically increased with respect to complexity something must be wrong with the way in which construction was organised.

The very same conclusion was further strengthened in 1993, when a series of working groups under the Ministry of Business and Industries published eight resource-area analyses, which said to:

> *"…draw a picture of the Danish business conditions and put the development opportunities in the 90's into perspective." (EfS, 1993: 7; own translation).*

The aim of the analyses was to establish a new and forward-reaching basis for the implementation of the future business policy in Denmark. This work triggered a series of attempts to put productivity and innovation on the agenda, and perhaps

more important: to do so in a systemic and coherent manner. One of the staged resource areas was the construction/housing area.

A new conceptualisation of construction

This area was described as rather peculiar or idiosyncratic when compared to other industries, most prominently the manufacturing industry. A distinctive trait, which was identified, was that the production in the on-site construction-market segment was characterised by fragmentation and discontinuity in the form of changing collaborative constellations on different locations each time. The construction sector was furthermore characterised as a distinct home-market business with great dependency of the public sector both as a purchaser and as regulatory authority.

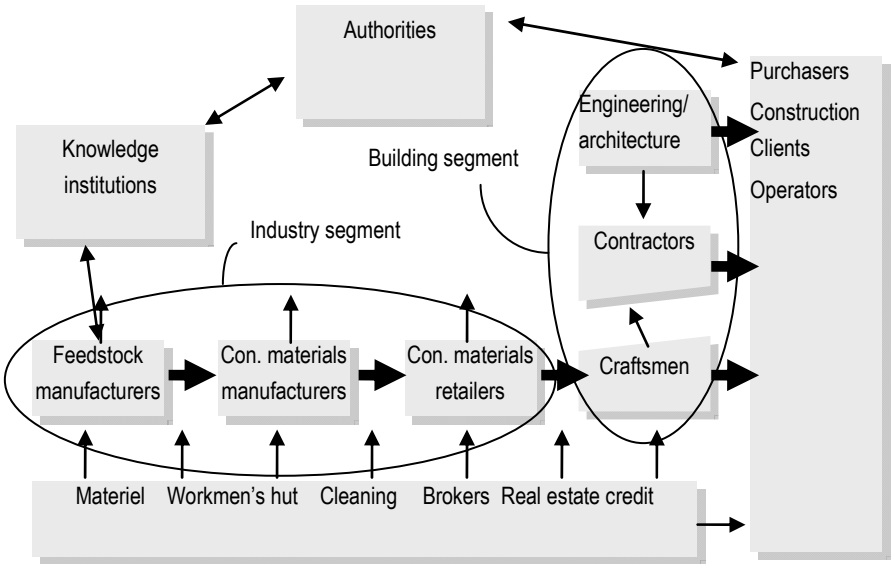


Figure 28. The construction/housing resource area (EfS, 1993: 22; own translation).

The analysis pointed to the need of increased competitiveness of the sector through a streamlining of the construction process and the vertical collaboration in the delivery system (EfS, 1993: 13). In summary, the following four central problems were identified:

- *The internationalisation problem*. Companies lack competencies and capital strength to enter foreign markets.
- *The transition problem*. Companies lack the abilities and production methods to operate within more than one market segment.
- *The collaboration problem*. Increasing future price competition leads to demands to increased long-term collaboration between companies in order of developing the industry's productivity.

– *The innovation problem.* Limited strategic process and product development and collaboration between manufacturers and construction firms.

Based on this problematisation of the sector the formulation of an enterprise policy strategy was seen as imperative in the years to come. This strategy should (EfS, 1993: 14):

1. Accommodate a coordinated effort from all actors exercising influence on the enterprise conditions of the sector, being the state, other public purchasers, and the infrastructure including knowledge institutions and organisations,
2. Utilise the collective spectrum of enterprise political measures, including: i) the public sector as purchaser; ii) regulation/deregulation of the area; iii) research, development and technological service; iv) education and training; v) supplementary infrastructure, including information infrastructure; and vi) promotion of trade.

Relevant in this work on the formulation of the problem of productivity in the construction sector is that governmental involvement and initiation assumed a pivotal role. Rather than working from the premises that the market could regulate it self, the basic point-of-departure was that there was the need for strong public intervention. One of the most influential political measures to be utilised was thus the idea of the public sector as purchaser.

The public sector should use its collective buying power to force new technologies (understood in its widest sense) onto the market, as the current technological totality, comprising "…*the complex of scientific knowledge, engineering practice, process technologies, infrastructure, product features, qualifications, and procedures*" (EfS, 2001b: 71, own translation), of the construction sector had created a *lock-in* situation, which the primary actors themselves were unable to exceed.

The lock-in situation

Let us look closer to the lock-in situation as it is described in the concluding 2001-report from the PPB-programme. In here the notion of specialisation linked to the systematic accumulation of knowledge and experiences is described as having a decisive impact on the long-term competitiveness of the sector. The flip-side of the coin of specialisation is however that it may lead to a lock-in situation.

A lock-in situation is furthermore described as typical consequence of the gradual accumulation of knowledge, being by and large both necessary and useful, if the knowledge is not put into use. What is interesting in the discussion of the possible lock-in situation of construction is that the responsibility; the agency is placed entirely in the hands of the companies of the sector:

> *"There is a need for new, radical ways of thinking; however there is a marked resistance towards changes, which might very well be the result of time-honoured customs and patterns of organisation, rather than of technological conditions." (EfS, 2001: 71, own translation).*

Although infrastructure[17] is mentioned in the above definition of a lock-in, the political articulation of the problem of construction is that the *market* is to blame; that the productivity is too low, the quality too insufficient, and client-needs are not fulfilled satisfactorily as a result of *market failures* (Dræbye, 2004: 3). Market failure is a central theme in economic theory where it is used to designate the condition where the production and distribution of goods or services by a *free market* is not efficient leading to inferior results for the society as a whole. Dræbye (2004: 3) thus states that if the market was well-functioning, the present actors [of the sector] would be outperformed. As the markets for building goods and services however fail to deliver change, neither through changes in the current companies nor through new actors, a market failure – a lock-in – must exist. What is however missed in this line of reasoning is that *market failures* occur on free markets, which contrast sharply with *controlled* or *regulated* markets, in which government intervention exerts a strong direct or indirect influence of conditions such as prices, supplies, procurement methods etc. – such as is the case with the Danish construction industry. One could question whether market actors are at fault, or if using neo-liberal measures and theoretisations to judge the performance of a basically *Keynesian-functioning* market, provides a correct understanding of possible responses. Furthermore, I would also question the assumption or leitmotif underlying the institutionalisation of *economic rational behavior* in the Danish construction sector found in a number of departmental notes and acts established in the wake of the rationalisation efforts of the 1950s and 1960s. Here I hint at the fixed price/time circular from 1958 and not least Law no. 216 of June 8th 1966 on tendering (Indenrigsministeriet, 1966: 216), which in its §3 *de facto* stipulates that the client is obligated to accept the cheapest offer. Both of these seem to operate from the

[17] Probably used in its widest sense also to designate legislation etc.

premise that going for the lowest price and protecting the original contract price from sub-sequent negotiations within 12 month of signing the agreement is *economic rational behaviour*. On the contrary, it might be the case that the institutionalised coercion of the lowest price and non-negotiation breed counter-productivity in that sub-optimisation is the only economic rational response on behalf of the actors. Not until 2001 was a new law on tendering passed (Law no. 450 of June 7th 2001, Ministry of Business Affairs, 2001b: 450) opening up for the possibilities of selecting the *most economically advantageous tender* (EU, 2004: 121) rather than just lowest price, thus acknowledging that rational economic behaviour also considers costs of quality and contingencies (Byggeindustrien, 2001). A move which was suggested in the 1993 report (EfS, 1993: 155).

Nevertheless, the responses provided towards breaking this perceived lock-in situation of the market was to initiate:

– A demand shock, channelling by legislative action a considerable building volume to the industry segment of the construction sector.
– An internalisation shock, through fusions with the purpose of achieving vertical integration, possibly driven through by international building groups.
– A de-regulation shock, being the creation of a free market for the building of subsidised social housing.

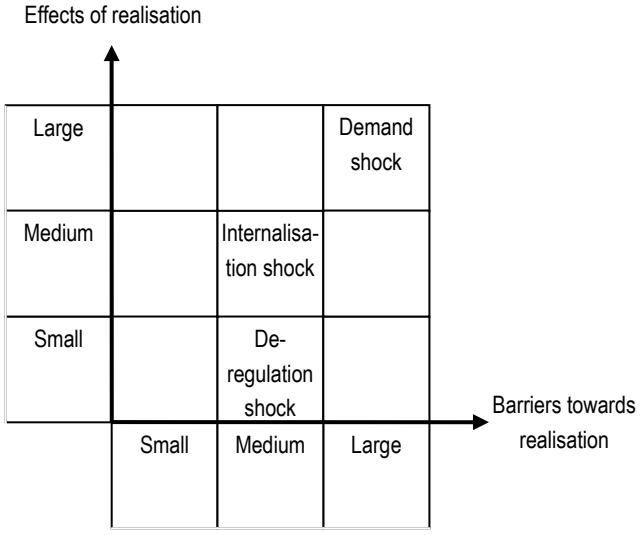


Figure 29. Strategising ways to break the lock-in (EfS, 2001b: 74; own translation).

When using the word 'shock' the report noted that a severe and sudden influence, which could either be positive or negative, was needed in order to strengthen the development, which had been initiated in the programme (EfS, 2001b: 71-72). An actual paradigm shift seemed to be the way to proceed in changing the mindsets of

the different actors of the sector; "*Specialisation is necessary and inevitable*" (EfS, 2001b: 73). As discussed below, the response however evolved differently as also the problematisation changed.

Breaking the lock-in

As a common, executive frame for the enterprise political efforts to break the lock-in it was suggested that three core areas were appointed: Project Refurbishment, Project House, and Project Productivity with the below foci (EfS, 1993: 16). The idea of a 'Project House' had already been launched three years earlier, when the Danish Association of Consulting Engineers (FRI) at a debate meeting for 30 decision makers from the construction sector and the authorities discussed the common grounds for an expansive business politics for the 1990's.

Table 11. Main areas of action in the three core programmes (EfS, 1993: 16).

	Project Refurbishment	**Project House**	**Project Productivity**
International market development			
Demonstration projects	x	x	
The public sector as purchaser			
Development contracts	x		x
Experimental projects		x	x
Research, development, and information-infrastructure			
Strategic research programme for construction	x	x	
Other ministries	x	x	x
Integrated business promotion			
Business support	x	x	x

A source of inspiration was the 'Project Ship' initiative launched by the Ministry of Business and Industries together with the shipyard industry and a series of research institutions. This project yielded tangible economic results through an abolition of the existing rigid separation of trades, integrated design and manufacturing, and improved logistics. It was the hope that a comparable collaborative approach in the construction industry would result in similar benefits (F.R.I., 1990: 16).

Another, and retrospectively observed, perhaps more important programme was the Project Productivity programme, whose 'public sector push' strategy, combining issues of productivity with collaboration, paved the road for the initial development of partnering as a measure to increase the productivity of the sector. As an example hereof, we can turn our attention to the notably output or realisation of the Project Productivity programme, which was seen in the PPB (Process and Product

development in the Building industry) demonstration programme. The PPB programme was formally initiated in March 1994 when the Ministry of Business and Industries in collaboration with the Ministry of Housing and Urban Affairs invited the actors of the sector to take part in a competition on process and product development (Clausen, 2002: 108). By November 2004, four consortia were appointed to participate in the programme and thereby carry out the suggested development programmes and demonstration projects.

Clausen (2002: 171) points to the PPU-consortia as the paradigmatic case for the introduction and development of partnering in a Danish context. He does so with reference to the original proposal from September 1994 in which the basic innovation idea is described under the heading 'Collaboration in the design process.' This part of the consortia was later referred to as the flagship in the programme – or as the "…*very symbol on the consortium's development efforts around which all other development activities revolve*" (Clausen, 2002: 171, own translation).

Table 12. The four PPB-consortia and their development strategies (Clausen, 2002: 110).

Consortium	Development strategies
Casa Nova	Flexible wooden building system for multi-story housing projects. Development activities centred on building and production technical issues.
PPU	Process development and reorganisation of the building process. Development of the design process trough vertical collaboration. Also collaboration in the construction process was an issue and was sought to be enhanced trough the development and implementation of a logistics system.
Comfort House[18]	Integration of planning, design and production. Development of an industrialised steel and plaster cast building system. Integrated collaboration was realised through the development of a 'common design office'.
Habitat	Building technical development centered on installations and wet rooms. Reorganisation of the building process through bettered communication, information and decision structures. Development and implementation of client-contractor workshops.

As can be seen the discussion of the problem of low productivity in the construction sector was at this time organised around a series of different points of convergence for processes of articulation, one of which was the ideal conception of *collaboration*, and more specifically *partnering and partnerships*, as a means of improving the productivity of the sector. According to this ideal all actors of the sector were thought to have a common interest in developing closer collaborative patterns, not only for the greater good of the sector as a whole, but also for the financial benefits

[18] Comfort House was originally known as 3P due to its focus on integrating planning, project design and production.

each actor could reap as a direct result of the new contractual, organisational, and operative set-ups.

Later development programmes, projects and policy analyses have strengthened the operative tie between productivity development and collaboration. Most notably in this respect is the governmentally endorsed programme 'New forms of Collaboration', which was initiated in 1998 as a part of the Construction Policy Action Plan (BM, 1998). This will be discussed further below after an examination of different discourses on the concept of 'the process' (i.e. collaboration) as it is constituted in the four consortia and unfolded throughout the PPB-programme.

From specialisation and vertical integration to collaboration

The 1994 white paper on the PPB-programme from the 'Danish Agency for Trade and Industry' (EfS, 1994a) opens by creating a sense of urgency. Drawing on i.a. the BUR and Double-Up report the need for an up-to-date and determined effort utilising the sector's concerted 'knowledge-trust' is highlighted. The problem; however is that the accumulated knowledge and expertise to some extent is based on the building practice of the 1950s and 1960s and whereas user-demands have developed drastically in the past 40 years, the productivity has not developed accordingly. This has led to the precarious situation that the price of the wanted housing quality has outpaced the wage development (EfS, 1994a: 1). This coupled with the sector's reduced earnings and the problem of insufficient internationalisation, means that the report proposed a rather broad-scoped development strategy encompassing efforts to promote integrated process and product innovations.

By means of exemplars and best practices

As previously noted, I suggest that the political efforts of the 1990s differed from the 1940s attempts at developing the sector as the 'new turn' consisted of opening a space for negotiated practices by means of establishing a series of exemplars and best practices to follow. This can be seen in the first piece of information material published to the wide audience on the PPB-programme (EfS, 1994b). It thus reads that by means of *experimental projects as tools* the programme *offers* the opportunities for interested parties to develop process and product innovations within the stipulated framework (EfS, 1994b). Although the list of important activities specified in the programme includes elements such as increased industrialisation, use of IT to facilitate logistics, testing of sustainable materials etc., it is important to

notice that the development has to take place by means of experiments, i.e. that the different actors (in the form of consortia) themselves develop project proposal and not least "…*conduct the projects over a longer period facilitating the opportunity for the consortia to adopt and test the gained experiences over a longer period*" (EfS, 1994: 4; own translation). Dissemination of knowledge was to be conducted in the form of exemplars on best practice for other actors in the sector to be inspired from and use. This is especially evident when observing the overall objectives of the programme (EfS, 1995: 2) where it is written that the consortia first and foremost should work towards an increased *internal* efficiency. Replication of results in the sector is secondary (EfS, 1994: 2). There is in other words from the outset a freedom of choice as regards to the methods and ways to proceed within this programme, which also can be seen in the different responses to the call as well as in the way the different consortia evolved. The basis for legitimisation was thus spacious and inclusive.

In the 1995 update to municipalities and construction clients on the programme (EfS, 1995) Minister of Housing, Ole Løvig Simonsen, described the impetus of the initiative as a transformation of the extensive knowledge within the sector and praised the consortia for considering qualities such as environment, indoor climate, ecology and good architecture, and not just technical and financial aspects. As such the PPB can be seen as an attempt to integrate the existing decentralised knowledge complex.

Principles of industrialisation and rhythm revisited

In the CASA NOVA[19] consortia the understanding of collaboration was closely linked to, or rather disposed by an industrialisation discourse. The idea was to use the *industrialisation principles* from the concrete element housing projects of the 1950s-1970s on a wooden building system (EfS, 1997: 3). The cornerstone of the project was to develop structures and assemblies, which could make possible a fast and easy assembly of complete building components on-site.

Developing a building system had first priority in the consortia; however the concerns in relation to collaboration and the process gradually emerged, as it became evident that assembly principles traditionally used in concrete buildings could not be replicated for use in wooden buildings. Horizontal assembly principles had to be abandoned for vertical assembly due to the wood-elements' sensitivity to weather:

[19] The CASA NOVA project is thoroughly described by Clausen (2002).

> *"The rational rhythm [of horizontal assembly] which has its advantages, also proved to have a decisive disadvantage in the form of its long sealing period…as the element production was organised to accommodate the horizontal assembly, a complicated flow and many different work operations occurred." (EfS, 1999b: 13; own translation).*

Thus, the imposed rhythm of the rational principles of industrialisation was opposed by the situation and had to be changed accordingly. As a result, collaboration and vertical integration, which hitherto had been downplayed, came into play (EfS, 1999b: 7).

Industrialisation, equations and the problem of continuity

The Comfort House project can also be seen as a re-articulation of the principles of industrialisation. A new building system, combining steel and gypsum, was seen as a response to the challenge of industrialisation. The building core and all the load-bearing structures were completely separated from the facades and other non-load-bearing structures, which are delivered to specifications and ready to assembly. The ideal of the consortia was to re-invent the practice of building – not only in term of the physical product, but also the procurement routes and the process (EfS, 1999c: 6). According to consortium participant Lundgaard (in EfS, 1997: 14-15) Comfort House is articulated as an attempt to remove the building site from the equation, as the root of the problems of building lies here; what should be left on-site is only the assembly work, which is described as fast-tracked, frictionless, rhythmic and with tolerances never seen before on-site. Collaboration efforts, which were targeted exclusively at the integration of architects, engineers and the contractors' managers, was most notably realised through the establishment of common drawing offices enabling face-to-face communication (EfS, 1999c: 6) between participants. Comfort House however ran into problems attributed to the lack of continuity:

> *"Even though we have seen benefits of rationalisation in the first experimental projects, it only yields similar economic benefits if we can establish a continuous production of buildings." (EfS, 1998: 23; own translation).*

In this perspective the consortia's strategy represents not a rationalisation of the craft element (as in the 1940s-1960s), but an attempt to eliminate the system's contingency, and although the unwanted craft element could be removed, another unknown quantity of the equation, the *insufficient market situation* (EfS, 1999c: 9), could not be isolated. In fact, by February 2000 (EfS, 2000b) it is argued that the

insufficient building volume is the all-surmounting barrier towards product development. The processual innovation manifested in the form of the common drawing office however deemed successful and came to play an important role in the political articulations of the concept of partnering. Comments from the consortium participants stressed the role of *face-to-face* communication and the inadequacies should this type of communication be substituted for IT-integrated project design alone.

Linkages

As in the CASA NOVA consortium, also the HABITAT consortium saw industrialised production as the way to proceed. However, rather than constituting a new building system, the consortium is launched as a *project design and –execution strategy* (EfS, 1995: 4). What this strategy entails is that the same *principles*, *linkages*, *materials* and *products* can be used on different and individual projects within the concept's inherent degrees of freedom and limitations.

HABITAT's response to the challenge of vertical integration was the development of a new phase model consisting of seven phases in which especially the first phase (workshop) is interesting in a contemporary partnering perspective. The workshop phase constituted an attempt to involve more actively the client in the building process, by use of *virtual reality* and visualisation of suggested solutions (EfS, 2001b: 33). Today the 3-stage HABITAT workshop model has survived (in a slightly altered version in the engineering company NIRAS, where it is used in their Value Management strategy. Thus instead of discussing *variations* over a basis-house in workshop 1, making *de-selections* in workshop 2, and finally *accepting* the project in workshop 3, today the NIRAS-model consists of a first workshop where *visions* for the projects are discussed, followed by a *realism* phase where project specifications are locked, and finally a *critique* phase in which the final project proposal (including prices) is approved and constitutes the *production basis* for the subsequent execution phase (BEC, 2003).

From the constraints of the phase model to exemptions

Building on the winning proposal from the 1983-competition 'The New Apartment Building' (da. *Det nye etagehus*) and previous experiences from development projects on logistics, the PPU consortium set out to make the building process more efficient by realising vertical integration between project designers and contractors (EfS, 1997: 5).

Digital tools, a new phase-model for the building process, and a new pricing system were the objects with which the goal could be achieved. One of the important contributions of the consortia was the establishment of a new phase model, which can be seen as an attempt to recast the traditional phase model, which from a technical-rationalist perspective had been successful in assuring *functional differentiation* rather than *integration*. In the 2001 documentation report from the PPB-programme (EfS, 2001b: 29) the differences between the traditional or normal project design process and the PPU-process are laid out as follows:

Table 13. Differences between the traditional or normal project design process and the PPU-process (EfS, 2001b: 29)

Normal process	PPU-process
Construction client's program	Construction client's program
1. Project disposition suggestion	**1. Program project**
Collaboration between client, consultants and authorities	Collaboration between client, consultants, contractor and authorities
2. Project proposal	**2. Project proposal**
Collaboration between client, consultants and authorities	Collaboration between client, consultants, contractor, subcontractors, manufacturers, suppliers and authorities
3. Scheme design	**Contracting**
Collaboration between consultants and authorities	
4. Final design	**3. Execution project**
Collaboration between consultants	Collaboration between consultants, contractor, subcontractors, manufacturers and suppliers
Call for tender – Award – Negotiation	
Contracting	
Execution	**Execution**

The 3-phase model is described as an expression of integration between the consulting and the producing parties and a means of involving clients and contractors more actively in the design process. Where the consortia succeeded in empowering the contractor in the early phases of the process to such an extent that vertical integration was accused of being nothing else than turnkey contracting in a new guise (EfS, 1998: 3-7), concerns were raised in relation to the role of the client who was not placed in the central role envisioned from the outset of the PPB-programme.

Re-articulation of the role of the client and the problematic of responsibilities

A reason for the apparent 'missing clients' is argued to be that the clients' role was not formulated in binding terms (EfS, 2000a: 6). Thus, where the 1950s and 1960s construction policies to a large extent dictated the clients' room for manoeuvre

through laws, executive order and circulars requiring the clients to conform to certain requirements and conditions in order to achieve finance (cf. the 1953 circular on state loans for untraditional buildings (Indenrigs- og Boligministeriet, 1953) a turn can be observed in the PPB programme in which the client is expected to actively engage in the formation of new markets and products. A reason for this turn might be found in the rather drastic decrease in the public expenditures for social housing experienced from the 1990s onwards. Gottlieb and Storgaard (2006: 33) e.g. documents that the ratio of social housing (including governmental buildings) to total building volume dropped from 26 pct to 10 pct in the period from 1982 to 2004. In Copenhagen social housing made up approximately half the building volume in the 1980s compared to one fifth in the second half of the 1990s (Ugebrevet A4, 2005). Thus, the absence of a large regulated market being forced or enticed to absorb new products/innovations makes it very difficult to produce on own terms *to* a market, and a strategy of producing *with* the market (i.e. in collaboration to the clients) has to be adopted. This explanation is plausible seen in the light of the Comfort House case above.

In the debate on the role of the contractor concerns were especially raised in relation to areas of responsibility. The proposed 3-phase model was thus seen as representing a rarification, a dilution of the functional stratification following from the traditional phase model with its unequivocal assignment of roles, tasks and responsibilities:

> *"You emphasise that the contractor is on-board from the very beginning and you want the subcontractors included earlier as well. And now I ask you: How is it possible to sit freely and design all the way into the preliminary phases without it resulting in perpetual discussions. And what about competencies – who decides? The architect? Or the contractor? Who has the main responsibility for the program project – as the saying goes: when there is one responsible part there is 100 pct. coverage, when there are two responsible parties there is two pct. coverage…" (EfS, 1998: 3; own translation).*

Furthermore, principle concerns were raised towards the consortium's:

– Remuneration scheme, in which the consultants were placed at financial risk.
– Calculation and price formation model, which was based on key figures rather than on competition.
– Open project finances.

Interestingly, all of the above elements can be seen as instrumental in introducing exemptions to the hitherto predominant practices of construction; elements which today are seen as central in the concept of partnering (as discussed further below) and are legislatively institutionalised and sanctioned. As it was expressed by a consultant engineer at a public debate:

> *"PPU disregards central and well-served principles…The consortium reduces the general element of competition as well as the parties' possibilities for effectively maintaining their own interests." (EfS, 1998: 4; own translation)*

The processual element in the PPB programme was originally founded in a concern of building long-term relationships between actors in different location of the 'value-chain' – i.e. in the notion of vertical integration. However, in the course of the programme the discourse changed from attempts to integrate vertically by engineering and introducing radical systemic innovations (i.e. the Comfort House approach) to the question of altering behaviour at an individual level with specific focus on the role of the client.

There are several reasons for this change; however it is obvious to point to the impact of the debate in both the *Project House* and *Project New Forms of Collaboration* programmes, where the ideal of collaboration was re-articulated opening up for a process of sectoral negotiation in which it was made possible for a variety of different actors to discuss and account for the problem of productivity from a common conceptual ground and theorise the relationship between productivity and collaboration, thus grounding the current institutional bases for partnering in Denmark.

In the Project House programme (By- og Boligministeriet, 2001a) Keld Fuhr Pedersen, who was one of the governmentally appointed monitors in the PPB-programme, thus discussed the role of the client as a change agent in the transition towards a new 'building culture' and especially stressed the potential of partnering in the planning- and design phases. The client was seen as the catalyst between the property market and the building sector whose role it is to ensure that the building sector is organised as appropriately as possible with the aim of ensuring value for money (By- og Boligministeriet, 2001a: 6). It is however the various clients in the public, social housing and private sectors who are to undertake the development themselves by: a) acting professionally as buyer and lead user; b) having insights into the inner and outer qualities and values of building; and c) by undertaking

management, steering and control functions in relation to the other actors (By- og Boligministeriet, 2001a: 13). In this ensemble of undertakings trust and negotiation, rather than meticulous planning, supervision or industrialised production emerges as the central mechanism in the integration efforts.

The co-existence of rationalities of rational behaviour

Now, I do not suggest that the notion of negotiated practices in any way replaces or eradicates the complex ensemble of the technical-rationalist political rationalities; rather it permeates the complex offering a new, additional meaning horizon; a new normativity of the sociality of construction.

As a counter-strategy to the dominant functional stratification in the construction industry, it reads in the Project House publication '*Close collaboration in the building segment*' (By- og Boligministeriet, 2001b) that there is a need for developing new forms of collaboration, which can rebuild the trust *from* the client and *between* the other parties of the sector. As I argue that the apparent new practice of negotiation does not supersede but rather co-exist with the technical-rationalist understanding the reason is that the former opens a field of intervention entirely depending on the presence of the problematic (the phase-model) in much the same way that the rationalisation efforts of the 1940s-1960s at first took the optimisation and rationalisation of the traditional building and work processes as its programme.

As seen in the above discussion of the different consortia efforts in the PPB-programme, several attempts were made to completely eliminate or re-invent the existing customs, practices, architectures and institutions of building. In their totality none of these attempts can be seen as successes at all neither when observing these from the perspective of the *product way* nor from the perspective of the *process way* (*cf.* By- og Boligministeriet, 2001b: 11-16), which both can be described as highly hegemonic politisations or systems attempting to package or close down sociality by reinstating a new type of uniformity and certainty. In the programme however also another type of practice or rationality was manifested – being a practice of negotiation, of continuously creating openings in the existing dispositive. Thus instead of proposing new social totalities to eliminate the problematic contingencies and bonds between the different parties, several objects and concepts emerged out of the programme all of which can be seen not as reinventions but rather subtle destabilisations of the existing system.

In the PPU-consortia the presence and problematics of the phase model is thus acknowledged and instead of eliminating it by proposing a radically new delivery system, as in the Comfort House consortium, the shortcomings are dealt with on the social rather than the systemic level e.g.:

– Contractors are involved in the preliminary design process together with the architects EfS, 1998: 3).
– Contractual basis is pinned down very late in the process when compared to the traditional procurement process (EfS, 1998: 8).
– Open book accounting and successive pricing based on specific project data and key figures (EfS, 1998: 9; EfS, 1999a, 12-13).
– The use of teambuilding activities and workshops as mechanisms for knowledge transfer, transparency and matching of expectations (EfS, 1998:6-8).

These elements can all be seen as technologies of exemptions to the dominant order of building and imply a shift in management rationality from focusing first and foremost on calculation and control to that of enrolment and interessement and the control of premises for action. Below I will discuss the formation of the field of partnering as a process of assemblage of technologies of exemptions.

7.3 Formation of the field of partnering

The Danish partnering policy development was formally launched in April 1998, when the Ministry of Housing and Urban Affairs published the 1998 *Construction policy action plan* (BM, 1998), which for the first time mentioned the term partnering, as a new form of collaboration, in an official government document. However, as demonstrated above the history of partnering dates back a few more years, at least to 1990 where a number of actors attempted to put the inter-linked problem of collaboration and productivity on the political agenda.

In the following chapter I will continue the previous discussion of the emergence of a practice of negotiation by outlining three events in particular in the articulation of partnering in Denmark: 1) the Construction Policy Action Plan from the Ministry of Housing and Urban Affairs from 1998; 2) the concluding 2002 report from 'Project New Forms of Collaboration'; 3) the 2007 status report from a construction clients network under the Danish Enterprise and Construction Authority. These sources, which have been selected due to their paradigmatic role in the discourse on

partnering, have been supplemented with sources citing specific examples from different partnering projects undertaken in and around the time of the above reports in order to shed light on how partnering was understood and enacted at different times. The analysis will thus start in 1998 and continue up to 2007, where partnering has become rather stabilised and institutionalised – both in political terms as well as a specific project-based practice (Gottlieb, 2008). The analysis will focus exclusively on the Danish establishment of partnering, and not take into consideration the progress in other Nordic or European countries.

The analysis will first and foremost point to how different existing rationalities were used as foundation and re-articulated in the concept of partnering. In addition I seek to discuss the proposed instrumentalisation of partnering and look into how central actors and institutions in the national discussion of new forms of collaboration have become established and stabilised.

Articulating collaboration as partnering

Based on the work conducted in the wake of the 1993 business economic analysis of the construction sector, the government presented a policy action plan in April 1998, highlighting the practical implementation of the political initiatives within the construction political area in the years ahead.

A total of 13 specific initiatives were specified, three of which located within the area of 'The constructions sector's productivity and collaborative conditions.' Here it read that the future efforts to increase the productivity of the sector should be focused on the development of new, more flexible forms of collaboration and precautions to improve the planning and management of the building process.

In the description of actual initiatives, the term 'partnering' was mentioned for the first time in a public policy report. In here partnering is presented as one among three new modes of collaboration, which were to be tested through a series of demonstration projects:

> *"Partnering is a long-term collaboration between a group of companies on two to three projects where incentives gives advantages for clients as well as companies" (BM, 1998: 20, own translation).*

The other two collaborative models proposed in the action plan are 'horizontal industrialisation', focusing on better collaboration and organisation at site level through use of planning principles from the stationary industry (e.g. Lean Construction), and 'in-between tender' being a form of tender based on outline

proposal or project proposal rather than on main project proposal as most often is the case in design and build contracts.

In order to pursue these objectives, a series of demonstration projects under a newly established programme was to be completed. These projects should build on the foundation laid in the PPB programme and focus more specifically on the concept of partnering.

During the three to four years of operation, a total of nine projects were completed and documented, however in addition to these projects the report concluded that the construction sector had undergone a quite substantial change, in that the use of new forms of collaboration had increased remarkably. Partnering was here used as a collective designation for a series of new forms of collaboration in which dialogue and trust plays a decisive role.

The report noted that 'Project New Forms of Collaboration' documents the following results:

1 Substantial economic savings (5 – 20 pct.) in design and construction coupled with the prospect of increased contribution margins for the companies.
2 Increased product quality through closer and more trustful collaboration.
3 Fewer resources tied up in disputes and no settlements in arbitration.
4 Better working climate throughout the entire construction process.

What however could not be documented was that partnering would lead to fewer deficiencies at transfer, fewer work accidents and less waste, and a more active user-involvement in the construction process. On this basis, the report concluded that the good results were positively correlated with a change in the mode of collaboration towards dialogue and trust instead of opposition and mistrust. How then, is a trustful and dialogue-based working relationship accomplished?

The diagrammatic of the workshop

Looking into the specific measures or instruments employed, the use of workshops is mentioned as the vital part in the combined process of building the trustful collaboration necessary for a partnering project to become a success (EBST, 2002a: 28). The concluding 2002-report from the network 'Project New Forms of Collaboration' drew conclusions on the use of partnering in the Danish construction sector based on experiences from a total nine projects completed in the years 1998-2002.

The report remarked that the collaborative efforts in the projects were concentrated around the following elements:

– Preliminary meetings/workshops regarding the form of collaboration.
– Signing of a collaboration agreement stipulating common objectives etc.
– Early inclusion of contractors in the design phase.
– Complete or partial open book accounting.

In four of the nine projects workshops were used several times throughout the process, whilst an additional two projects used workshops in a less planned or formal style. In common for the projects using workshops is however that the workshop has been used *less extensively* than it had been hoped for. Nevertheless the report concludes that the workshop plays a crucial role as:

> *"…the significant part in the joint efforts towards building the trustful collaboration necessary for a partnering project to become a success." (EBST, 2002a: 28; own translation).*

This conclusion was based on the argued fact that the attained directly quantifiable improvements relating to price, quality, and time were derived as a result of changes in the collaborative patterns and climate. In this respect the workshop was not seen as the only measure to be taken – also the use of e.g. benchmarks, facilitators, open books, and charters of agreement was crucial; however the workshop was seen as the locus for these activities. The report further concluded that in the following development of new forms of collaboration – a development which will focus on value based collaboration – the use of workshops will play an even more prominent role.

If results however were scarce at this point, how could it then be concluded that the workshop is one of the most central elements of partnering and that it will play such a crucial part in the future development of the industry? One possible answer to this question lies in the sources of inspiration for the network.

First and foremost it is possible to point to the previous experiences from the PPB programme. Much of the work which had been conducted in this programme had a dual focus partly on developing new industrialised products and partly on developing organisational arrangements, which would facilitate the development and implementation of these new products. The success of this programme can be debated when looking into the actual results *vis-à-vis* the intended objectives. Especially in relation to the actual construction phase attempts to rationalise the

process failed (EfS, 2001: 36), however when looking into the design phase results were more positive. As previously stated the Habitat consortia's efforts in reorganising the design and production process was deemed especially successful. In the concluding report on the programme it reads the following:

> *"Habitat has with its workshop and production concept found its own specific model in which the consortium has made close ties to its suppliers. The collaboration and coordination focuses to great extent on regulating the interfaces between the parties. The integration of work processes is transferred to the suppliers and their production machinery. As mentioned the product specification in Habitat is conducted by choosing between standard solutions, which can be supplied industrialised by the three system suppliers – choices are made on workshops with participation from architect, engineering, systems supplier, and construction client." (EfS, 2001: 34; own translation).*

This central workshop was especially focussed on in order of staging the construction client more actively in the construction process; a very central element in the public procurement strategy. The other three consortia had less success with their collaborative efforts:

> *"In general it must be noted that the consortia – with the exception of Habitat's system delivery concept – not really have succeeded in providing new alternatives to reorganising the construction process or reducing the number of work operations on site. (EfS, 2001: 36; own translation).*

A wide number of different explanations to these collaborative problems were put forward; however one of the most central issues was believed to be that, on an organisational level, was imperative to work with changing attitudes in order to break the traditional *disciplinary* organisation of the construction process, which previously might have been an ideal *juridico-discursive* mode of regulation of a sector in demand for a drastic increase in production capacity and thus flexibility on behalf of its actors; however counter-productive *vis-à-vis* the future challenges facing the sector. With the documented success of the workshop in the Habitat-consortia a regulatory instrument had been provided, which with relatively little effort, legislatively as well as in the practical execution, could accomplish a lot.

The workshop as an instrumentalisation of trust

The workshop element therefore played a prominent part in the following demonstration projects completed under the 'Project New Forms of Collaboration'

in the following years. The rather rigid workshop process from Habitat, which was closely connected to the specific building system employed, was however not used directly. What however was used was the conceptual layout of the Habitat workshop concept, in which the relevant actors of the project through a series of workshops discuss common and individual objectives and success criteria, organisational set-up, conflict resolution models, etc., and gradually work towards a specific design and a production plan. Especially important in this respect is the inclusion of the contractor in the design phase as to ensure the 'buildability' of project.

This was also the approach in the so-called *Karré 24-project* (Bang *et al.*, 2002), which was completed in the years 1997 to 2001, which documented monetary savings in the region of 13 pct. whilst delivering quality to specifications and completing the project within scheduled time. One of the reasons for this success was said to be the increased communication and dialogue between architects and contractors in the early phases of the projects. Especially relevant in this respect was that this close collaboration took place between actors who were authorised to make decisions breaching traditional organisational boundaries (Bang *et al.*, 2002: 7, 32).

In another demonstration project the social housing association DAB chose to work in partnering in order to:

> *"…avoid considerable quality losses in consecutive refurbishment projects by allowing continuous work from contractors who have demonstrated their abilities to complete projects with an optimal balance between price and quality." (Høgsted, 2001: 7; own translation).*

Prior to this project the client had completed seven sections of balcony refurbishment and in the seventh section in particular there had been considerable problems with the quality of the work. The client's objectives were thus to capitalise on the expected advantages of being able to a) handpick a certain contractor without being forced into compulsory competitive tendering and; b) include the contractor in the design phase and production planning.

As for the collaboration in the design phase the client invited the contractors and architects to an introductory workshop. The invitation read as follows:

> *"The partnering model is one of the new forms of collaboration, which is experimented with in the construction sector in order to create a better product and a higher degree of satisfaction among the project participants. In this project it means that it is not necessary to conduct a bidding round prior to selecting the contractors as the client can choose the companies he sees well-suited to complete the project. Your company has been chosen to participate in the*

> *preliminary meetings on the project. We therefore suggest that the first meeting will be used to introduce the companies, and that we subsequently exchange experiences relating to the problems each contractor, architect, and client has encountered during the previous sections. After this we will collectively attempt to propose suggestions on how to ensure the best possible result, both in terms of material and specifically the work process, on this section. We expect the meeting to last for a couple of hours and that we afterwards decide on the necessary meeting frequency, before the contract is signed and work commence." (Høgsted, 2001: 12; own translation).*

A total of three subsequent meetings were agreed and the report concludes that although these meetings were not formally held (and denoted) as workshops there was nevertheless an open dialogue and a constructive collaboration about project optimisation and economy.

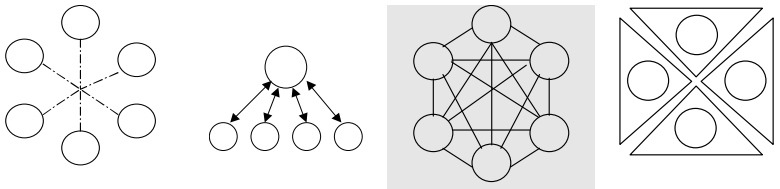
Following the work on the first workshop a collaboration agreement was completed stipulating the following objectives: a) that the construction process is to be completed with a high degree of trust, openness, and mutual respect; b) that the contractor, architect, and client work together in close dialogue to optimise the project; c) that a steering committee with the role of monitoring process progress and solve conflicts will be established; and d) that the client can terminate the contract, and appoint new contractors, if the project cannot be completed within the expected financial frame. On this topic the report concludes that the contractors acknowledge the agreement's role in creating and maintaining a trustful collaboration.

Looking into the financial aspects of this project the collaboration agreement carried an expectation on behalf of the client that the total expenditures would not exceed DKK 3,884,400. The first bid was DKK 483,530 over this target; however negotiations and price reductions eventually reduced the contract price to DKK 4,088,010 which was below the budget sum of DKK 4,100,000. The report however notes that the challenge of cutting costs has been met even though reductions are distributed equally between the contractors. The contractors, which have accepted the reduction mentioned the form of collaboration, including the trust to the client, architect, and each other, as a decisive argument. The final project costs eventually amounted to DKK 4,208,496, which was seen as an acceptable and modest overrun for a refurbishment project, and that use of partnering had contributed to this result.

Looking at the central features of the workshop it is apparent that this form of formalised interaction is described as a binary opposite to the traditional project design meetings and client/contractor meetings on the following parameters:

- A mutual exchange of thoughts and ideas occurs.
- Actors strive towards building mutual trust.
- The objective is to achieve consensus rather than power-based (forced) solutions.
- Participants see each other as equal parties to the project.
- Sufficient time is allocated to the discussions.

As such the workshop can be seen as an instrumentalisation of a new conceptual understanding of collaboration according to a certain communicative ideal (teaming), as illustrated below, constituting the workshop as a rather normative phenomenon, scripting a certain behavioural conduct on the part of the participants, e.g. people are expected to put forward any relevant knowledge they have for the sake of the common interest.



	Market	Management	Teaming	Habits
The communication is...	unilateral	bilateral	multilateral	non-existent
Decisions are taken…	decentralised by the individual	by the management	mutually by the group	decentralised by the individual
Decisions are based on…	individual knowledge	management's knowledge	group's knowledge	common knowledge

Figure 30. A classification of forms of coordination (Grandori, 2002, in Gottlieb et al., 2004: 13 adapted from Thomassen and Clausen, 2001: 16 and Thomassen, 2004: 83).

The crucial role of the workshop is best observed in its linkages to other central aspects of partnering. The workshop is thus described as the scene for both the strategising and operationalisation of the concept of collaboration; the place in which tasks and roles are assigned and partnering is given a 'body' in the form of often quantifiable measures and specific activities. This is illustrated accordingly in the concluding 2002 report from 'Project New Forms of Collaboration', in which the tentative list of items on the workshop agenda includes areas such as: 1)

discussions of common as well as individual objectives; 2) principles of measurement of progress (both qualitative and quantitative); 3) organisational and contractual set-up; and 4) settlement of accounts.

A very interesting feature of the 2002 report is the complete absence of the notion of productivity. Apart from the previously mentioned 'substantial economic saving' partnering is not linked especially significantly to the ideal of collaboration as a direct lever for productivity development. Instead, partnering is seen as:

- A lever in changing the negative image of the sector thus facilitating the recruitment of young, skilled, and motivated people.
- A way to create a new culture by changing individual attitudes towards trustful collaboration and developing collaboration skills.

Thus instead of seeing partnering as a strategic actualisation of the concept of productivity, partnering is instead transformed into an actualisation of a wider cultural change.

As key actors responsible for the resolution of the above objectives the report pointed specifically to the larger construction clients – with special emphasis on clients in the public sector, and the very same actors joined their forces in 2001 in a semi-governmental construction client's network 'Bygherrer skaber værdier' (*Construction Clients Create Values*), which in the course of six years published app. 30 reports and a series of guides on the topic of new forms of collaboration and procurement, including guides on how to conduct workshops and establish partnering contracts. The activities in this network formed the basis for the development of a governmental guide to partnering for public clients (EBST, 2004).

The workshop as an instrumentalisation of change

In addition to seeing workshops as primarily pre-project optimisation instruments, which had been the dominant approach in the demonstration projects in 'Project New Forms of Collaboration' the work conducted in the construction clients' network '*Bygherrer skaber værdier*' added another dimension to partnering concept – and not least the workshop. In June 2005 the working paper '*Partnering – erfaringer skal drøftes og bruges*' (EBST, 2005b) was released. The message was that experiences from a partnering project should be used as a platform for the next project – in partnering.

The paper notes that instead of hoping (and waiting) for the best of all worlds, i.e. a sector characterised by long-term working constellations between different companies, which can only be a mirage due to different structural and legislative conditions, efforts should be concentrated on improving the use of partnering – and that the utilisation of own as well as others' experiences plays an important part in this respect. These experiences can be of many different types:

– Product related, being technical conditions.
– Process related, being how the different elements (e.g. workshops, incentives, open books, lean design, and use of benchmarks) in the collaborative efforts has functioned.

The report argues that these experiences can be used in any new project and not just in partnering projects. Furthermore the use of previous experiences is not linked to the idea of strategic partnering (continuous collaboration between the same parties on multiple projects) but is seen as a lever to prepare the different actors to participate in future partnering projects. As such, the paper points to the fact that there is a gradual transition in the sector from a 'beginner's situation' where no one has worked in partnering to the 'optimal situation' in which everybody is familiar with working in partnering:

Projects in which every-body is familiar with partnering	Projects in which the main actors are familiar with partnering	Projects in which the majority is familiar with partnering	Projects in which only few is familiar with partnering	Projects in which no one is familiar with partnering
This is the optimal situation, which is unusual	This could e.g. be client, main contractor, and counsellors	It is estimated that the majority of construction projects today are characteristic of this situation		This situation is becoming increasingly infrequent

Figure 31. Stages in the state of the sector. Transitions of partnering (EBST, 2005b: 3)

A primary source of inspiration for this strategic notion of the workshop as a facilitating locus for the exchange of experience is found in the UK construction sector in the form of the so-called 'Project Partnering Post-Project Review Workshop(s)' (EBST, 2005b), which has been described in the book 'Construction Partnering & Integrated Teamworking' (Thomas and Thomas, 2005) as well as by the UK National Audit Office (www.nao.org.uk). In here it is recommended that a workshop is to be held short time after project completion with the objective of identifying key-experiences from the project, which can be used in future projects.

The central element of the workshop is the use of benchmarks or key performance indicators relating to the common objectives, which have been agreed upon at the start of the project. The working paper from the construction clients' network suggests that the legislatively endorsed key performance indicators stipulated by The Benchmark Centre for the Danish Construction Sector (BEC) are to be used – supplemented by further project-specific indicators.

This approach has been taken in a recent demonstration project (Høgsted, 2006) competed under the auspices of the construction clients network. The project, consisting of a patient hotel and 30 apartments, was completed under a partnering agreement between seven parties (municipality, social housing association, clients' adviser, main contractor, architect, engineer, and service provider), and consisted of the following elements:

1. Establishment of a partnering framework based on the governmental partnering guide. The framework included:
    a. A partnering agreement with common objectives.
    b. The use of workshops.
    c. Description of incentives.
    d. Plan for evaluation.
    e. Establishment of a steering committee.
    f. Use of key-performance indicators.
2. New procedures for selection of contractors according to the following criteria (in prioritised order):
    a. Economy.
    b. Architecture.
    c. Partnering.
    d. Organisation.
    e. Project transference.

On a preliminary workshop a total of 28 product and process objectives (denoted 'values') were identified as key performance indicators for the project progress. In the course of the project four project review workshops were held, including the final post-project review workshop. The objectives were grouped accordingly:

– Economy and time.
– The collaboration process.
– Architecture, values, and project solutions.

– Stakeholders.

As testament to the more proactive nature of the workshop, i.e. as a means to improve the basis for future partnering projects rather than being 'just' a tool for creating trust, the following conclusions and future recommendations were drawn:

– The precondition in the tender documents that 60 pct. of all subcontracts should be appointed through competitive bidding is counterproductive vis-à-vis the intentions of including the subcontractors' expertise in the design phase of the project.
– Consequences of key-personnel leaving the project are to be handled better.
– Completion of project: detailed design activities should not be allowed to far into the actual construction phase.
– Project group meetings and steering committee meetings should not be conducted on the same day as it weakens the participants' overview.
– It is important to be able to discuss and asses the collaboration process continuously during the project – and make necessary adjustments.
– Not only is it important to utilise the contractors' knowledge bases in the design phase, it is also important to be able to use the technical advisers' competencies and knowledge of the project in the construction phase. Supervision plans should be composed.

One of the most interesting features of this project was that the partnering agreement, on the topic of workshops and meetings, contained a direct reference to the governmental 'guide to partnering' with the following laconic wording:

> *"To further the partnering process a preliminary workshop, cf. guide to use of workshops in partnering, will be held." (Høgsted, 2006: 37; own translation).*

What is interesting in this respect is, as previously hinted at, that the workshop itself no longer is seen an object of experimentation but rather as a more or less well-defined phenomenon or social event, which functions as a means to achieve something else than just a good, trustful working climate.

The Construction Clients' Network was responsible for the completion and evaluation of 30 demonstration projects testing new forms of collaboration. In the 2007 status report from the successor to the original construction clients network (EBST, 2007) it is argued that partnering with the work carried out from 1998 to

2001 in the development programme 'Project New forms of Collaboration' had been tested and documented to such an extent that focus was shifted towards the collaboration between the client and the users instead of between the client and construction companies.

Furthermore, instead of focusing on partnering as a conceptual unitary notion for partnering, a series of other concepts were introduced and linked to partnering, e.g. value management, user-interaction, benchmarking, etc., which, at the same time, can be seen as both a substantiation of the notion and as a dilution. Partnering now seems to function as a rather abstract nodal point to which other elements, instruments, or concepts refer as a source of legitimacy. In this complex, the workshop plays a recurrent role as the locus of interaction; the abstract and physical space, in which the all important communicative activities in the form of contractual and economic negotiations, user-involvement, design choices, benchmarking etc. are conducted.

De-institutionalisation and the organisation of partnering

Organisation denotes the process through which networks among institutions and actors are stabilised and formalised, as a particular structure of behaviour (Kjær, 1998: 7). Here I will address the organisation of partnering.

Let us start this description of the organisation of partnering by observing the following conceptual representation of the construction clients' networks place and functioning in the administration of the public construction policy. It was immediately seen here that there is a much wider group of legitimate authorities of delimitation in play than previously. The authorities are but one element in a networked relationship of institutions.

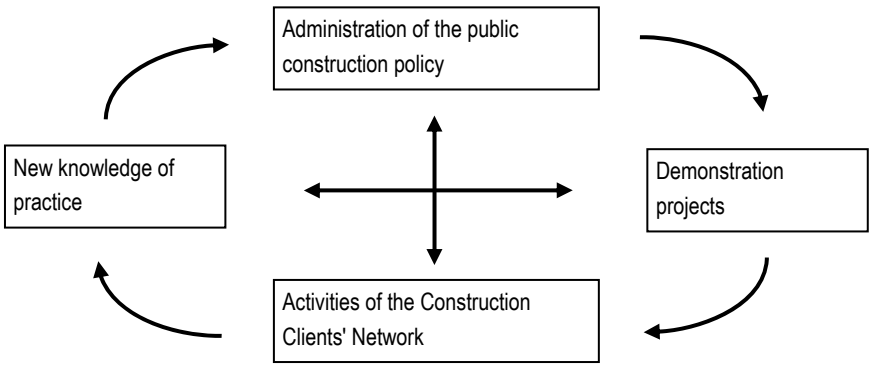


Figure 32. Network relationship of the construction clients network (EBST, 2007: 6).

In here it is envisioned that the development activities by the Construction Clients' Network (CCN) is driven through a partnership between the Danish Enterprise and Construction Agency (and later also by the Ministry of Social Affairs) and construction clients from the public, private, and social housing sector. Within this network of actors and institutions the activities of the CNN are illustrated in the above figure.

The primary driver is the administrative authority which commissions various demonstration projects which are evaluated and 'translated' into policy proposals or recommendations by the CNN. As an example of this process we can turn to the governmental guide or instruction to public construction clients on the use of partnering (EBST, 2004), which was developed on the basis of the work of the CNN.

Furthermore, in relation to this development, several statutory orders and consolidated acts have been passed as a result of the activities conducted in this network the most important of these are statutory orders no. 1135, 1394 and 948 (OEM, 2003; 2004a; 2006) and consolidated act no. 338 (OEM, 2005). All of these legal documents can be seen as regulatory devices operating on the basic assumption that by e.g. setting pre-contract qualification criteria forcing the supply side to form 'strategic relationships' a number of benefits can be gained ranging from better designed solutions, leading to fewer defects and deficiencies, to economies of scale. This can e.g. be seen in the recent consolidated act no. 338 on framework agreements, where it in the remarks to the act reads that the combination of strategic partnerships and framework agreements will lead to a more efficient process and lower prices as suppliers will have economies of scale and the opportunity to learn from one another as well as from project to project. The act does however not contain or support any explicit development of the firms' innovative capabilities, nor does it promote any specific construction technologies. The companies are in other words expected to be able to act largely single-handedly or unassisted in order to realise any benefits of establishing collaborative relationships (Gottlieb *et al.*, 2006).

The reason for describing the constructions companies as *largely* unassisted actors is that a series of supportive institutions and organisations more or less have been established as a direct result of the developmental work laid out in the action plan and even more so in the industry-driven consortia established as a part of the demonstration programmes. These supportive institutions and organisations are

both of semi-public and private character. The Benchmark Centre for the Danish Construction Sector (BEC) is an example of the former. BEC describes itself as a commercial foundation established by organisations representing the entire Danish construction sector (BEC, 2006). Since July 1st 2005 Danish construction companies have had to present KPIs for previous projects if they wish to undertake construction projects for the Danish State as is declared in the aforementioned statutory orders no. 1135 and 1394 describing the terms of use of partnering, PPP and Key Performance Indicators in state projects.

Other institutions embarking in the development and support are the Danish construction trades associations e.g. The Danish Construction Association, The Danish Association of Construction Clients, The Danish Association of Consulting Engineers as well as governmental task forces.

Further, reinforcing the organisational set-up of the development of new form of collaboration in the Danish sector is the *PLUS-Network*, which is a more or less direct continuation of the CNN. The PLUS-Network (abbreviation for *Partnering, Læring, Udvikling, Samarbejde*, or in English: *Partnering, Learning, Development, Collaboration*) perceives their own role as a matter of acting in a field of demonstration projects, public and municipal construction authorities, and research and educational institutions, seeking to create relations to other actors and stakeholders in the sector's innovation system.

As such the network assumes a pivotal role in acting as a national organiser or broker of knowledge on construction process development and innovation. Interestingly however, is that the PLUS-Network no longer is direct financially supported by governmental funding as were the case with the CNN. This can be seen as an institutional shift in the status of partnering from a policy focus area, which needs strong governmental intervention and control to a more or less well-established phenomenon, which has achieved a specific conceptual form and direction and is released into the 'public domain' to be used and adapted to fit more specific operational purposes. In other words: that it has become rather normative phenomenon however with strong regulative foundations.

The below chart summarises the primary milestones in this development. It should by no means be seen as an exhaustive illustration of the development. The idea is rather to present a retrospective understanding of how the notion of partnerships in the Danish construction sector has come into being with special emphasis on the preceding or rather underlying rationale behind partnerships.

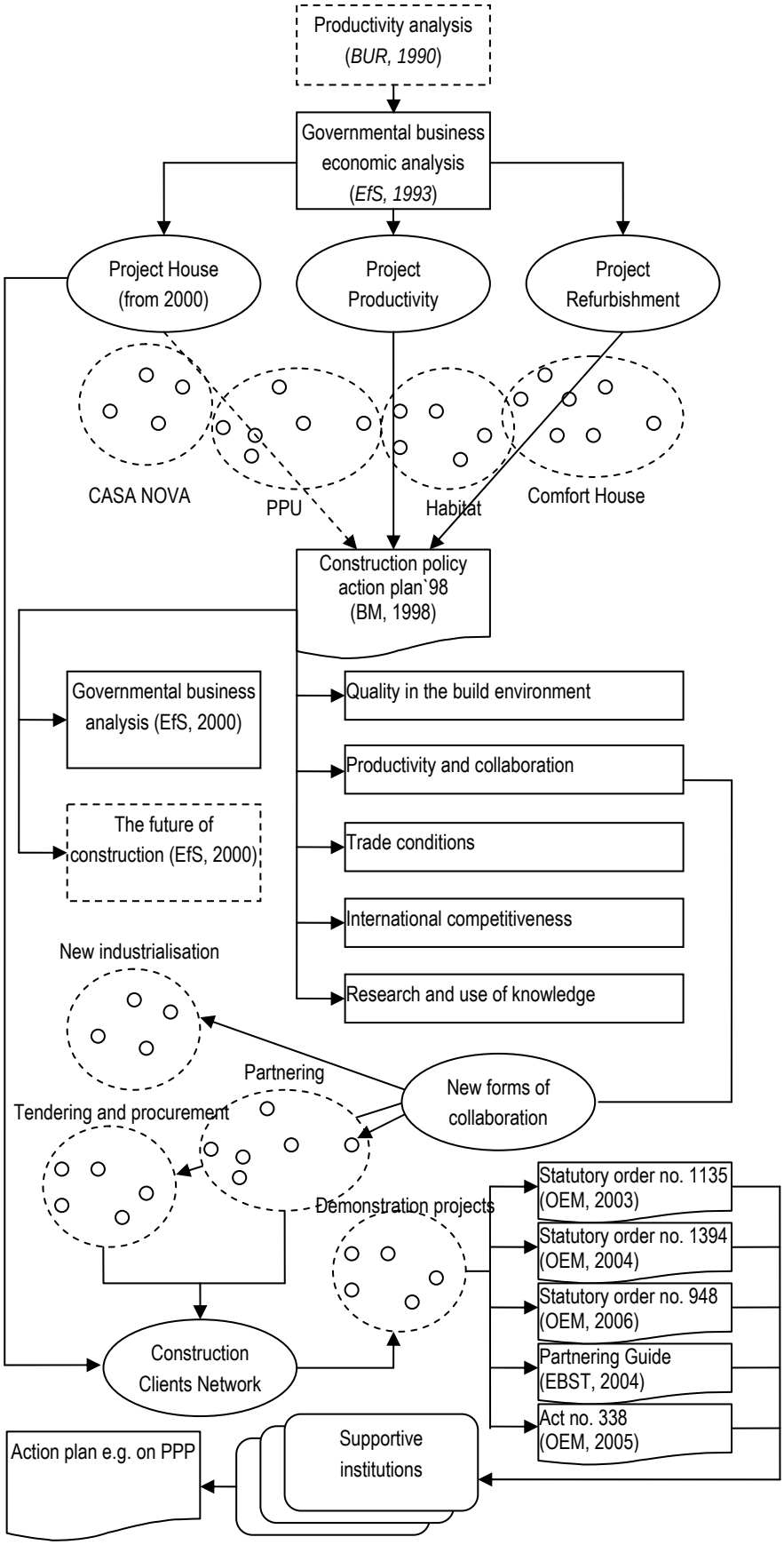


Figure 33. A brief overview on the emergence and development of partnering in Denmark (Gottlieb, 2008).

The following legends are used in the above figure:

Table 14. Legends used in chart of public policy development of partnerships in Denmark

Symbol	Explanation
	Policy reports and analyses
	Debate papers
	Development programmes
	Institutions/organisations
	Policy agendas, orders, statutes, acts and laws
	Collection of projects
	Demonstration projects

Below, I will condense a series of elements in order to discuss the functioning of a partnering dispositive.

7.4 Partnering as opening and destabilisation of stratification

Where the post-war efforts as described previously focused on the process, on correspondence and on the elimination of problems with its focus on the regulation of details through planning, I argue that partnering represents not a new dispositive *per se* but a concretisation of a general change in the conception of governance in construction – a concretisation of a new modality. Rather than complying with a rule-bound and rigid practice of regulation and exercise of power in which contingencies and problem are sought eliminated ex ante; that if the planning is thorough enough problems will not arise, and if problems arise it is because the planning has failed, in partnering the exemption has become the rule.

Thus, from the government assistance scheme for social housing (Indenrigsministeriet, 1945), with its numerous changes, prolongations and derivative laws, consolidated acts and departmental notes to promote efforts of rationalisation a complex yet highly durable social system based has emerged, which is now challenged by a *logic of situationalism* and *exemptions*.

In 2000 Michael H. Nielsen, managing director of the Danish Construction Association, stressed the need for articulating partnering as an opening of the sociality of construction rather than as an unambiguous solution. He said:

> *"Provocatively speaking partnering can be compared to the way the building crafts work in smaller projects where clients, counsellors and crafts businesses enter into agreements on daily*

> *basis without extensive contractual bases […] Instead of addressing partnering as an unambiguous concept it would be much more correct to address the fact that the building sector has to be able to work within a wide variety of different agreements tailored to the specificities of the project and the requested parties." (Licitationen, 2000; own translation).*

According to Nielsen (*Ibid.*, 2000) new frames for management, collaboration and communication have to be established if the productivity of the sector is to be developed and key issues in this respect are *situationalism* and *exemptions*; situationalism in the sense of acknowledging the need to tailor responses to the task in hand, and exemptions in the sense of being legitimately able to do so by means of destabilising the political hegemony of stratification. I argue that partnering to a great extent operates on these premises. An argument I will substantiate by turning to the 'partnering-flower' below, which is used by Nyström (2005) to define partnering as a network of overlapping similarities sharing a limited set of typical, common features or activities:

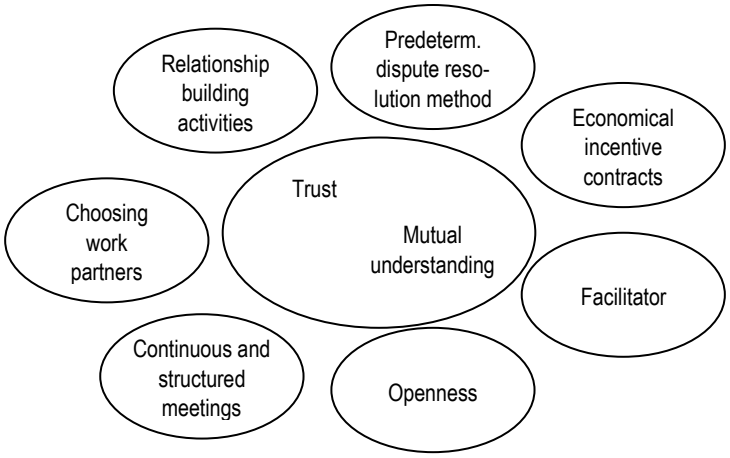


Figure 34. The partnering flower (Nyström, 2005).

As seen in the light of the previous examination of the formation of the field of partnering vis-à-vis the intentions of the political programmes out of which it was born, partnering (and not vertical integration, specialisation or fusions) emerges as a *assemblage* of exemptions rather than as a planned imposed 'shock.' Thus, I contend that each of the elements of the 'flower' can be seen as discursive strategy; an articulations of an alternative sociality based on a destabilisation of an existing order.

The ability to *choose work partners* represents a change from having them imposed through the coercive mechanism of the 'lowest bid' logic. Partnering in a Danish context opens for this possibility by allowing at least some freedom of choice for the public construction client. Furthermore, in continuance of the 2003 statutory

order no. 1135 (and later no. 1394) (OEM, 2003; 2004a) and the 2004 partnering guide (EBST, 2004b) the National Agency for Enterprise and Construction issued a so-called *letter-of-freedom* (EBST, 2005a: 11) authorising the public construction client to waive the standard General Conditions for Works and Supplies for Building and Civil Engineering Works (AB 92, ABT 93, as well as the ABR 89) when using partnering. Also the directive on the coordination of procedures for the award of public works contracts, public supply contracts and public service contracts (EU, 2004) can be seen as a legislative opening in this field, e.g. as in its article 34 on public works contracts stipulates that:

> *"In the case of public contracts relating to the design and construction of a subsidised housing scheme the size and complexity of which, and the estimated duration of the work involved require that planning be based from the outset on close collaboration within a team comprising representatives of the contracting authorities, experts and the contractor to be responsible for carrying out the works, a special award procedure may be adopted for selecting the contractor most suitable for integration into the team." (EU, 2004: 138)*

With these openings, the traditional safeguarded areas of responsibility are legislatively dissolved to some extent, stressing the need for creating coherence, as opposed to correspondence, in a now less than well-known (i.e. technical-rationalist) setting by means of *relationship building activities* as well as *continuous and structured meetings*. Continuous dialogue and proximity becomes the central coordination mechanism when planning becomes insufficient or impossible.

Predetermined dispute resolution method acknowledge the fact that disputes will eventually arise, and that these can and have to be dealt with, preferably by means of negotiation between parties at so-called lowest level when the conflict arises, rather than ex post by arbitration or management.

Economical incentives models acknowledges the circumstance that contingencies cannot be planned for and that a 'true' lowest price is but a mirage as we might know the price of every single piece of material or operation in a perfect world, but that we can never know the price of the collective work – no matter how much we refine our planning and calculation methods.

The *facilitator*; the *intercessor* represents an individualising and subjectivating exercise of power, distinct from the discipline's individualising and subjugating form of exercise of power through surveillance. The facilitator is a shepherd:

> *"…an impartial discussion leader, who sees to it that both parties have their views heard in a balanced way. His task is also to manage the meeting in such a way that the discussion focuses on the relevant issues and does not become stuck on trivial, unconstructive matters." (Nyström, 2005: 477).*

The facilitator has to ensure harmony; however a harmony coming from below, from the participants' negotiation of a shared meaning horizon, rather than from above in the form of a plan to which the participants have to comply. The facilitator is an attempt to create coherence. It is still an exercise of power like surveillance and compliance; however it works from the governed subjects' capacity as free actors (Otto, 2006). As such, in *Foucauldian* terms, it is a conduct of conduct; a type of intervention reliant on active inputs and negotiations from the participants in order to reach a *mutual understanding*.

Partnering as opening of space through nullification

In summary, and giving no particular primacy to the elements of 'trust' and 'mutual understanding' I would propose the below (re-)conceptualisation of partnering. What this in essence illustrates is the tendency of a partnering dispositive to emerge as a sort of nullification[20] of the traditional; the dispositive of rationalisation – in the sense of the stratified, hierarchical and prescribed construction sector. In relation to this idealised highly ordered image of the sector, partnering emerges as an opening of space; as a phenomenon functioning by taking aboard (or making possible the attachment of) a wide range of different discursive as well as non-discursive elements that all counteract the circumscription of space brought along by the rationalisation efforts of the post-WWII development.

Hence, one could say that whereas the elements of the dispositive of rationalisation tried to cancel out an existing reality or sociality by assimilating and superimposing it; by completely prescribing the course of action hereby preventing contingencies, partnering works by freeing up this disciplinary space, grasping events at the level of effective reality (Foucault, 2007). Partnering works on the basis of effective reality in trying to make the social function by treating wanted as well as unwanted events and occurrences the same; by letting things take place:

[20] This concept is taken from Foucault (2007) who argues that post-disciplinary dispositives of security (which will be discussed further in the following third part of the dissertation) have the essential function to respond to a reality in such a way that this response cancels out the reality to which it responds by nullifying, limiting, checking or regulating it.

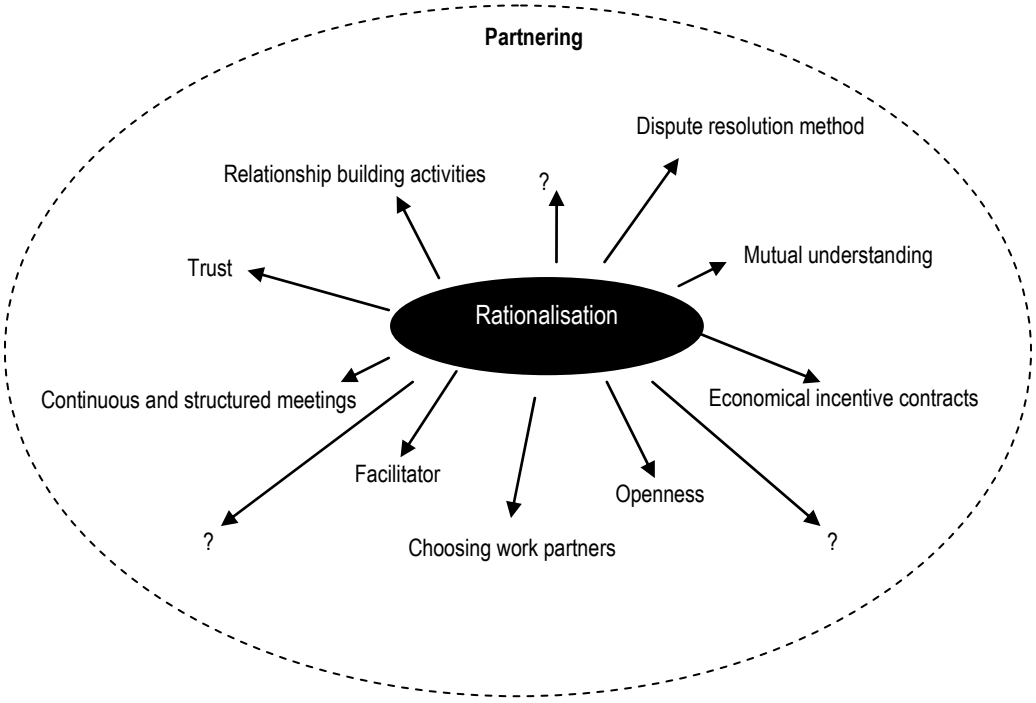


Figure 35. Partnering as an opening of space through nullification of the rational

Partnering is centrifugal (Foucault, 2007) in that it opens a space for action, where not everything is planned in advance[21].

Trust as governance mechanism

Then what about trust? The economically based understanding of trust normally proposed in the partnering literature (*Cf.* Thomassen, 2003; Nyström, 2005) and not least the response to the problem of building trust, i.e. repeating the game, is in my eyes not satisfactory. I rather agree with Roukonen (2008: 59), when she proposes the following characterisation of trust, which here is closely related to the notion of responsibility. Trust occurs, when:

– We put ourselves in a dependent position which involves the risk of being harmed.
– We do not monitor the trusted party.
– We do not believe the risk will actualise because we take the other party to be responsible in the sense that we hold her to normative expectations which we believe arise out of a shared perspective on the nature of our relationship and the normative expectations it gives rise to.

[21] This will be examined and explained further in the third part of the dissertation.

This way around, trust can be seen as the necessary precondition of partnering. Doing partnering, i.e. refraining from the traditional planning rationality and the safeguarded standard documents, substituting surveillance for negotiations and the uncertainties related hereto, means that clients, contractors, etc. put their companies at risk – in a partnering perspective the interesting question is then how to extend this risk of company; this opening of institutional trust into the sociality of the project.

This is a question of subjectivation, which will be addressed in the third part of the dissertation within the perspective of governmentality. Taking a combined *Luhmannian* and *Foucauldian* perspective, I propose that trust, as laid out above, should be understood and studied in terms of social technologies. Luhmann (1979) argues that in all trust relationships an element of social control is installed; that trust educates, and that the building of trust therefore gains the character of what we with Foucault could call a social technology, which dependent on reception can be seen as a process of subjection or subjectivation.

According to Misztal (1998: 73) Luhmann argues that trust serves to increase the potential of a system for complexity and its function is the reduction of social complexity by increasing the 'tolerance of uncertainty.' Furthermore, Dunn (1984: 73) argues that the concept of trust as a policy, rather than as a passion, is:

> *"…a method of dealing with the fact that most important human interests depend profoundly on the future free action of other human beings…" (Quoted in Misztal, 1998: 100).*

Trust can thus be seen as a mechanism for coping with the freedom of others in the first instance and of methods or technologies to construct free acting individuals in the second instance. And rather than seeing such mechanisms of social control as constraints on freedom, they should be seen as aids in collaboration (Otto, 2003). This will be discussed further in the third part of the dissertation, where the question of how this opening of space where trust is actualised will be the main focus.

Part III: Actualisations of partnering and the dispositive of negotiation

8. Opening of space and negotiations of order

In part II of the dissertation, I have conceptualised partnering as *a logic of exemptions* in relation to the traditionally perceived temporal and technical-rationalistic diagrammatic of Danish construction. To reiterate, partnering is argued to dissolve or destabilise the traditional *juridico-disciplinary* elements, practices and institutions of construction such as e.g. the phase model, the general conditions for work and supplies, the tender process and circulars thus inserting a fundamental uncertainty in the otherwise taken-for-granted relations between the different social actors. Accordingly, when the pervasive principle of stratification, operating through the circumscription and enclosure of space, is displaced the existing sociality is problematised. The new political logic favours the opening up of space to enable circulation and passage (Elden, 2007: 565), and this forces actors to negotiate and rethink their own roles, responsibilities and positions according to a new socio-spatial ordering.

8.1 Dispositive, space and social order

The case-study will continue from where the previous dispositive analysis left. Thus, where the preceding chapter unpacked three idealised patterns or systematics of social interaction and organisation, in this third part of the dissertation I will examine how the release and opening up of space that partnering is argued to bring about, affects the sociality of building projects and how different actors seek to make sense within a new space of action. In short, this is what I refer to as the *actualisation* of partnering, i.e. how partnering is realised and materialised, and how partnering as a specific practice actualises a distinct social order.

It is important to note, once again, that a dispositive should be seen as theoretical abstraction; as an idealised pattern of organisation. As such, borrowing from Foucault (2003), I suggest that we can think of the dispositive analysis as having provided us with three distinct spatial orderings (*spatialisations*) of what we could call 'the gaze of construction' – that is how the politics and practices of construction at all have been thought historically speaking. Thus, in *The Birth of the Clinic* Foucault

(2003: 17-18) distinguished three orders of spatialisation, which I have generalised below for the purpose of my study:

– *Primary spatialisation* referring to the conceptual, homologous space within which a phenomenon is understood.
– *Secondary spatialisation* concerns the 'visibilisation' or thought-representation of the above, homologous space – that is how the above conceptualisation of the phenomenon is thought mapped out onto a given social system.
– *Tertiary spatialisation* referring to all the *gestures* by which the phenomenon is circumscribed, invested, isolated, divided up and distributed in social space. Tertiary spatialisation further brings into play a system of options that reveal how the above spatialisations are handled in a specific sociality. Let us refer to these gestures as practices and techniques (Osborne and Rose, 2004); as *social technologies*.

Taking these spatialisations as ordering devices for the case-study in hand, we can now see the preceding dispositive analysis in a new primary light. Accordingly, we can think of dispositive analyses as having provided us with three distinct views on how construction as such *ideally speaking* has been understood at different times. The dispositive analysis has furthermore pointed to the ways in which space historically has been made visible and is concretised within this conceptual understanding. Stratification with its phase model, single-point of control, scientification of work and notion of the construction sector are all examples hereof. We have also seen examples of the tertiary spatialisation of the social technologies employed. Consider as examples the modular system, the unity-management, the circulars, the workshop, the open-book accounting etc. Hence, the dispositive analysis outlined three historically situated instances of how construction has been thought in politics and practice; three distinct fields or systems of possibilities for construction governance and practice.

The three dispositives should, as previously discussed, by no means be seen as linear successions of each other in the way that the emergence of a new dispositive renders existing modes of e.g. organising and management obsolete. Even though, we at any given point in history would give primacy to one dispositive over another in explaining the sociality *we* are facing, the dispositives should rather be seen as facing *one another*. What this means is that one dispositive re-strategises exiting relations between the elements of another dispositive thus opening for the

formation of new discursive and non-discursive elements as well as for the re-actualisation of existing elements.

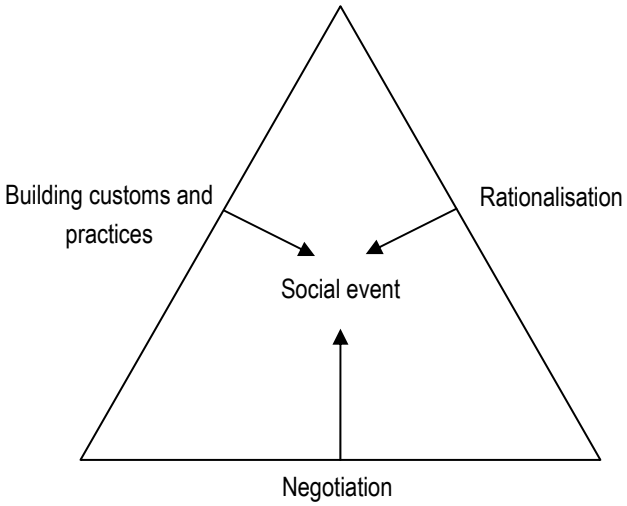


Figure 36. Studying social events as the encounter between dispositives

Taking this as basis for the case-study in hand, the task that we now face in this third part of the dissertation is to observe contemporary phenomena as '*in-between-dispositives'* – each dispositive stabilising sociality in its picture thus constituting the object of the study as a point of rivalry and appropriation.

In the following chapters of the third part of the dissertation, I will examine how the space of partnering is *thought*, *materialised* and *handled*; on the ways in which the 'traditional' order of construction is re-strategised and made available for negotiation, and how the different actors of the project relate to these challenges. In other words, I examine how: "…*space is actualised by various practices and techniques*" (Osborne and Rose, 2004: 213). In doing so, special emphasis will be put on discussing the case with a view to the notion of the *post-disciplinary*, as it in my eyes provides an interesting and appropriate framework for understanding the different activities on the project.

The remainder of the present third part of the dissertation falls into two main chapters. First, in chapter 9, I will discuss how the opening up of space that partnering entails on an abstract and conceptual level is thought in the context of a specific project. Then in chapter 10 I examine a series of the 'gestures' by which partnering is actualised and handled. For now, I will however start by giving an introduction to the U2 project with the aim of placing it in a wider societal context, which I believe is necessary to do in order to understand and appreciate the full scope of the activities carried out.

8.2 Setting the scene: A case for partnering

In 1992 the so-called 'Ørestad Law' (Law no. 477 of June 24th 1992) was passed by Folketinget (the Danish Parliament). The law made possible that the Ministry of Finance together with the City of Copenhagen could establish a partnership on the development of a new city quarter (The Ørestad) as well as a metro system. Within a publicly guaranteed 'loan bracket' of DKK 1.615 million the newly established Ørestadsselskab was commissioned to develop the new town area according to an overall plan selected by means of an international architect competition. The architect competition was finished in November 1994 and by the beginning of 1995 a public debate over four prize awarded projects took place. As a result of this debate it was decided that the proposal developed by the Finnish architects ARKKI should form the basis for the further planning. One of the central elements in the plan was that the:

> *"The Ørestad should be a green area built around water and nature. A high architectural quality should make it attractive for Danish as well as foreign companies to settle down in the area. Furthermore, attractive dwellings and cultural institution should attract new residents to the area."(Arealudviklingsselskabet, 2007: 32-33; own translation).*

A total of four neighbourhoods within this new area were to be completed, being Ørestad North, The Amager Fælled-quarter, Ørestad City and Ørestad South. Bordering the two northernmost parts of the new area, Ørestad North and The Amager Fælled-quarter, several existing city areas and buildings are located, one of which is the 'Urban Plan Area'.

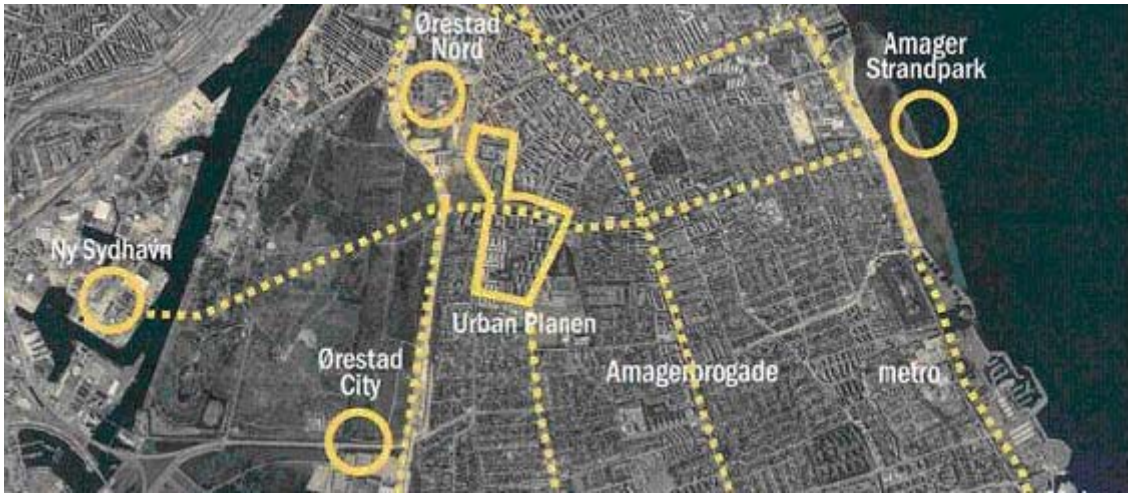


Figure 37. The placing of the 'Urban Plan Area' next to the Ørestad (Fællesadministrationen 3B, 2005: 5).

Partnership as precondition

In order to assure integration between the existing city areas, in particular the Urban Plan Area, and the new city areas 'Urban Development in Communities' (*Byudvikling i Fællesskaber*) invited to a citizens' meeting in the spring of 2000. Urban Development in Communities was a group of local habitants, companies, sport clubs, social housing organisations, the municipality of Copenhagen, Ørestadsselskabet, and the local Amager trade council. An important milestone in this respect was realised in September 2003 as Copenhagen City and the housing divisions *Dyvekevænget*, *Hørgården*, *Remisevænget Nord*, *Remisevænget Øst*, and *Remisevænget Vest* together with the housing organisations *FB* and *KSB* and the joint administration services *3B* signed the partnership agreement 'Urban Development in Partnerships' (*Byudvikling i Partnerskaber*) for the period August 2003 – August 2007 (Partnerskabet, undated). The formation of the partnership agreement in August 2003 can be seen as the direct result of a rejection from the Danish Urban Committee (*Regeringens Byudvalg*) to provide financial support to the establishment of a so-called model-area for the Urban Plan. Instead, with the partnership agreement the municipality of Copenhagen together with the housing organisations committed themselves to realise the intentions of the original agreement.

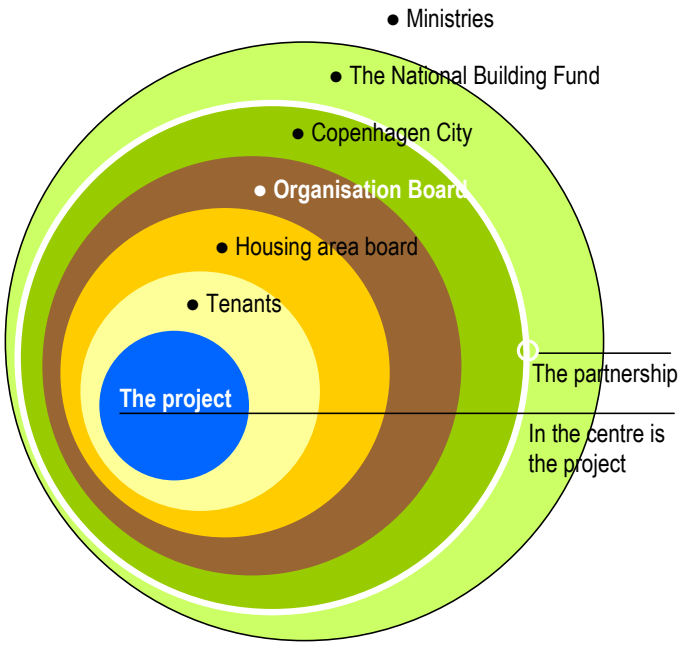


Figure 38. The partnership organisation (3B fællesadministration, 2005).

The partnership is conceptualised as six eccentric circles placed inside or on top of each other. The inner circle, representing the project, is described as the centre of

the partnership. The figure represents the partnership as a phenomenon having an inside as well as an outside delimited by type of actor and their degree of involvement in the specific projects in relation to the Urban Plan. The partnership comprises the following actors:

Table 15. Actors of the partnership (Partnerskabet, 2006; own translation).

Actors	Type of involvement
The tenants	Participates in the projects through the area meetings and a series of work groups.
The housing area boards	Maintains the interests of the tenants in relation to the completion of the projects.
The organisation board	The prime authority of the Urban Plan as well as the actual client on the project.
Copenhagen City	Supervising authority of the Urban Plan. Approves the project three times throughout the project (scheme approval A, B, and C). Provides building permit, which functions as an approval of the technical and architectural solutions.
The partnership	Consists of the above four actors. Is served by the partnership secretariat.
The National Building Fund	Provides financial support to the project. Approves the project two times throughout the project (scheme approval A and B).
Ministries	The Ministry of Refugee, Immigration and Integration Affairs and the Ministry of Social Affairs is involved in the project and defines the overall guidelines for the use of the The National Building Fund's money and the interests of the society.

Rather than conceptualising the partnerships in terms of functional purposes (e.g. tasks, services and responsibilities) it is done with a view to actors and stakeholders, and whether they can be considered central or peripheral in relation to the project. This is a rather weak conceptualisation of the partnership, however if we observe some of the other labels attached (*cf.* Partnerskabet, 2006) it is apparent that the concept of *occupant-democracy without borders* plays an important role in the articulation of the form and contents of the specific partnership, which furthermore encompasses the very same characteristics, which Andersen (2006: 75; own translation) highlights in his semantic analysis of the articulation of the partnership phenomenon, i.e.:

– Cross-sectoral collaboration.
– Future- and vision-orientation.
– Community.
– Dialogue.
– Agreement under developing circumstances.
– Project orientation.

Cross-sectoral collaboration and the future orientation

Urban Development in Partnerships is financed by the municipality and the two housing organisations FB and KSB. At the time of the establishment of the partnership agreement, the housing organisations together with *Landsbyggefonden*[22] and Copenhagen City already worked towards procuring redeployment funds (in the region of DKK 400 million) for the refurbishment of the four housing divisions in the Urban Plan. Of this amount app. DKK 21 million will be distributed to the Urban Development in Partnerships project. In an apparent link to Andersen's (2006) theoretisation of partnerships as second order contracts; i.e. that partnerships are about committing to a future commitment, so to can this specific partnership be understood. la Cour and Andersen (2007: 7) argue that partnerships:

> *"…define a commitment to accept future commitments to the extent that they define the overall purpose of the collaboration. The overall purposes do not represent operationalized goals. Rather, they are goals about goals, about outlining an image of the future and a general vision for the partnership. In that sense, it is a commitment toward future commitments."*

Looking into the partnership agreement of Urban Development in Partnerships project, it is apparent that this follows the same line of reasoning. Here it is written that:

> *…a major part of the specific projects [within Urban Development in Partnerships] will be defined by the theme partnerships" (Partnerskabet, 2003: 1).*

Thus, although it is the financial parties of the partnership who make the final decisions about granting funds for given projects and activities, competence and finance is delegated accordingly (Partnerskabet, 2003: 2):

– The financial parties formally have the legal decision making competence.
– The financial parties have the overall financial responsibility for the funds each of them has procured on the project. They furthermore have to ensure that the finances are used under existing laws within the area.
– The finances for each theme partnership are placed with the specific institution in which the partnership is organisationally anchored.

22 An autonomous organisation founded by social housing organisations managing e.g. the administration of capital for publicly subsidised building projects.

– The parties of the agreement are committed to, at as great extent as possible, work towards realising the recommendations from the theme partnerships and the partnership board.
– Finally, it is written that the "…*specific theme partnerships are given as much competence as possible*".

In other words, although the legal parties of the contract have the final word regarding the financial aspects of the specific projects and activities, the contract specifically operates on the basis of a 'presentification' of the future, i.e. that what is specified is not an specification of exact future exchanges; rather "…*a horizon in the present for how the parties will work to specify new possible exchanges in the future*" (la Cour and Andersen, 2007: 4). This work of specifying new possible exchanges in the future is to a great extent decentralised and placed in the hands of the local community and the local professional participants of the project.

Community and dialogue – objectives and organisation

It therefore makes good sense, when it is argued elsewhere in the programmatic material from the partnership committee that the main objective behind 'Urban Development in Partnerships' is to ensure a positive and holistic development in relation to residential environment and living conditions, and at the same time strengthen the residents' sense of responsibility for, and influence on, the local area. The so-called social coherence is to be strengthened by attracting and holding on to a diverse demographic group of residents and at the same time giving the weaker groups of residents a boost. It is furthermore stated that 'Urban development in Partnerships' aims at capitalising on the development in the Ørestad area and create the basis for a fruitful partnership and an area characterised by social coherence. In bullet points, the some major objectives behind the partnership are (Partnerskabet, 2005: 12):

– To ensure a development, which creates a unified urban area characterised by social sustainability.
– To work towards strengthening employment rates in the area.
– To create a physically coherent urban area and an integrated housing market.
– To initiate special efforts aimed at the weak groups of inhabitants.
– To develop a common physical and cultural life, which also include habitant of ethnical background.

Accordingly, the leading principles behind the partnership are:
– To involve and give actual influence to the local area.
– To anchor ideas and methods at the lasting parties of the area.
– That the local facility managers are an active part of development work.

Due to the wide scope of objectives it is not surprising to see on the below organisational chart that the actual physical refurbishment projects make up only a small part of the whole partnership arrangement.

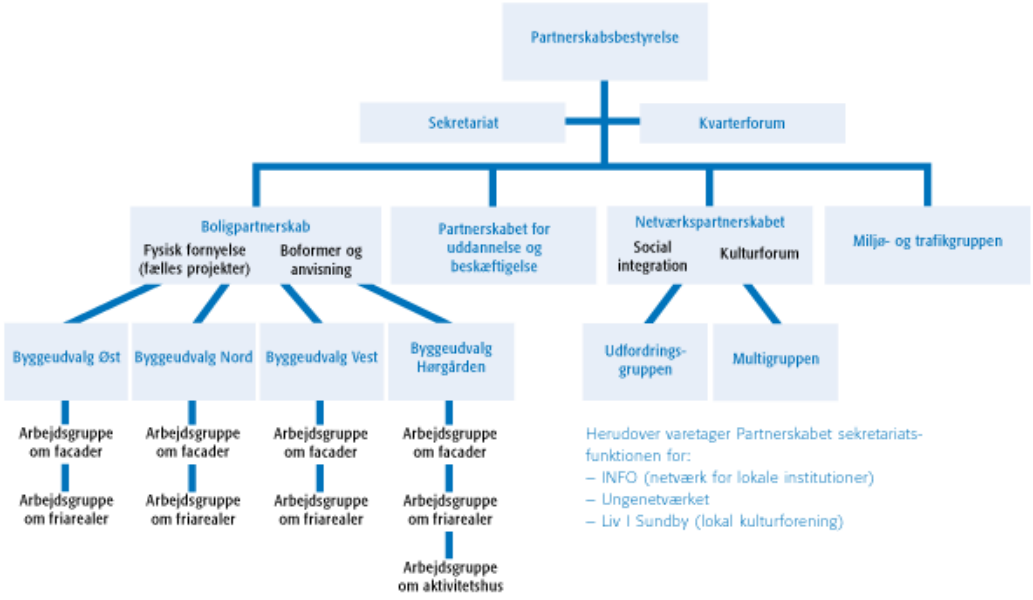


Figure 39. Organisational chart for the partnership organisation (source: www.partnerskabet.dk).

As can be seen here, a total of four construction committees have been established to perform the programmatic functions in relation to the physical refurbishment of the four main areas of the Urban Plan, i.e. *Hørgården (Byggeudvalg Hørgården)*, *Remisevænget Nord (Byggeudvalg Nord)*, *Remisevænget Øst (Byggeudvalg Øst)*, and *Remisevænget Vest (Byggeudvalg Vest)*. I will return to these later on, and concentrate for the moment further on the 'Urban development in Partnerships' organisation.

Agreement under developing circumstances – actors, user-participation and empowerment
Arguing that partnerships differ radically from contracts in relation to a social dimension, la Cour and Andersen (2007: 6) suggest that partnerships represent an attempt to formulate mutual obligations concerning the so-called self-creation of the individual partners as responsible for and relevant to the partnership. This is in

opposition to traditional (even complex) contracts, which presuppose the contractual parties as independent actors with independent rights, and thus also presuppose the contracting parties' capacity; i.e. their prerequisites as contracting parties. This is also the case in the partnership agreement concerning The Urban Development in Partnerships project. Here the partnership board is constituted as the executive authority for the project with the primary task of ensuring overall coherence as well as a holistic orientation in the diverse efforts of the project. The board works to ensure consensus in relation to the various activities and projects, which are of common interest to the parties of the project. The board is thus argued to work on basis of consensus decisions. Referring to the partnership board are three theme partnerships dealing with 'homes and open spaces', 'business and occupation', and 'culture and social networks.' In addition a group working with issues related to 'environment and traffic' has been established. The housing partnership, which is the overall focus of this case, works towards developing the housing environment, trying to make the local area more attractive for current as well as future residents (Partnerskabet, 2005: 13).

A key issue in the project is a so-called 'expanded model for occupant-participation' as a result of which several open workshops on the future of the residential area have been held. Furthermore open working groups has been established, and several annual workshops called 'Kvarterforum' has been conducted, in which occupants are given the opportunity to suggest new tasks and project groups to be established. One of the specific outputs in relation to the occupants' participation is the establishment of a set of *dogma rules* as governing principles for the entire refurbishment process:

Table 16. Dogma rules for the refurbishment process.

Dogma rules for the refurbishment of open spaces	**Dogma rules for the refurbishment of façades**
The Life Nerve	Changes have to be of pleasure for the neighbouring apartments
Light/shadow	Identity of the housing division
Identity of the housing division	Sustainable materials and solutions
New activities	Faithful to the existing architecture of the buildings

These dogmas and participatory demands are also transferred to the specific refurbishment projects to be completed. In the tender programme (3B fællesadministration, 2005: 25; own translation) it is thus stipulated that:

> *"It is essential that the overall intentions about architecture, functions, plurality, and user-participation can be maintained […] we make demands that the contracting team participates actively in the further user-participation process, that they are open towards – and seek – plurality whilst maintaining a focus on architecture, preconditions, and functions."*

One of the central keywords in the above intentions relates to functions. The occupant participation is thus to be based on functional requirements rather than on specific technical solutions, which can be difficult to comprehend for laymen. For this reason the client has specifically instructed that the selection of partners is based primarily on their collaborative abilities (3B fællesadministration, 2005: 6). Hence, user participation is not only seen as a question of empowering occupants and giving them a sense of ownership for the project. It is also seen a tool for securing a high architectural quality. User participation is however also about empowerment as it is described as a method for qualifying the individual occupant to see more opportunities and gain insight into the process. This requires that occupants need to get acquainted with values and other elements that can affect the project. This is described as an important feature, as the occupants participate in the final prioritisation of the form and content of the project (3B fællesadministration, 2005: 7).

Project orientation – the building theme partnership and projects

Of primary interest in this case is the theme partnership on buildings. The building theme partnership, who works towards developing the local residential area, is organisationally anchored at the joint administration services *3B*, which for this reason plays a prominent part in the project. As a part of the organisational set-up, a partnership secretariat has been established as the 'prolonged arm' of the partnership board. This secretariat is lead by a project manager, employed in 3B, whose job it is to administer the project, coordinate the occupant participation, and support the theme partnerships. There is however also other reason for attributing 3B an *ex ante* prominent role in the project, being that the organisation has, particularly in guise of their former head of construction activities Erik D. Præstegaard[23], had (and still have) much influence on the construction sector development in the past 30 years, e.g. as a board member in the construction clients'

[23] As a curiosity it can be mentioned that Præstegaard has continued his involvement in the development of the construction sector now in the social housing construction clients network *AlmenNet*, who together with architects WITRAZ and 3B has used the Urban Plan project to develop and test a guide to occupant-democratic processes (AlmenNet, 2007).

network (*Bygherrer skaber værdier*) – as previously discussed, a very active promoter of partnering and other new forms of collaboration in Danish construction. Nevertheless, the partnership secretariat has been involved in the process from the very beginning of the project. One of the most noticeable outputs of their work came in 2004 as they organised and conducted a four-day workshop entitled Urban U2 -2004, where occupants and professionals worked together to develop an idea-catalogue for the further development of the area in relation to four themes:

– Open spaces.
– Buildings.
– Common functions.
– Identities.

These themes were deemed highly relevant for several reasons. First and as already discussed, with the completion of the Ørestad, Urban Plan finds itself in a new urban context it has to match. As a result hereof there is also a need to change the stereotype identity associated to living in the Urban Plan, as it is difficult to attract so-called resourceful occupants. From a more construction technical perspective there is however also some more pragmatic reasons for the partnership efforts. The Urban Plan was first built in the period from 1965 to 1971. In 1984, just two years prior to the establishment of the Danish Building Defects Fund as a part of the quality assurance and liability reform that same year, the original façades were replaced, which however was of such a poor quality that they had to be replaced once again. The refurbishment of façades and open spaces are the central construction activities of the case study project.

Refurbishment project: façades and open spaces

In the following, I concentrate on describing the part of the partnership concerned with the refurbishment of buildings – more specifically the façades and open spaces. The Urban U2 – urban development in the Urban Plan project (hereafter abbreviated U2[24]) is widely regarded to be the hitherto largest refurbishment project in Denmark, and probably also the largest project of this type ever to be completed. The primary construction activities are related to the refurbishment of façades in all four different segments or areas of the Urban Plan and the establishment of new open spaces in three of the areas. As noted previously, the current façades

[24] The name U2 is an abbreviation of the Danish 'Uge 2' meaning 'Week 2', referring to the start date of the project in 2004.

consisting of fibre cement cladding were set up in the mid 1980s in connection with the first refurbishment of the housing area. Due to manufacturing faults, the fibre cement plates have now begun to crack and the damages have classified as building defects by the *Danish Building Defects Fund* giving access to financing of the refurbishment project. The current façade restoration project comprises re-insulation in addition to the replacing of façade elements. The financial frame for the projects under the Urban Plan umbrella amounts to DKK 177.515.000.

Table 17. Financial frame for refurbishment projects on the Urban Project.

Craftsmen expenditures ex. VAT	**Facades**	**End walls**	**Ground floors**	**Open spaces**	**Individual choices**	**Total**
Remisevænget Øst	49.828.000	8.180.000	4.453.000	7.764.000	2.120.000	72.345.000
Remisevænget Nord	24.661.000	2.366.000	1.120.000	3.854.000	1.474.000	33.475.000
Hørgården I	30.265.000	3.212.000	1.392.000	3.960.000	300.000	39.129.000
Hørgården II	22.405.000	2.766.000	1.208.000	5.477.000	710.000	32.566.000
Total	127.159.000	16.524.000	8.173.000	21.055.000	4.604.000	177.515.000

The single largest sub-project is the Remisevænget Øst project, which I have studied over a period of 10 month in 2008.

Figure 40. Garden side façades on Remisevænget Øst before, under, and after works (Gottlieb).

Remisevænget Øst consists of 15 six story concrete buildings constructed in 1965-66 covering a total of 752 apartments. Remisevænget Øst stretches approximately 400 metres along Englandsvej on its eastern side. Between the more or less parallel sets of blocks, the open spaces are located. Towards the east, the façades (in project terminology called the garden side) are described as rather closed, whereas the façades facing west (called the entrance side) are more open due to the many balconies, which interrupts the otherwise closed façade expression (3B fællesadministration, 2005). In addition to the 'compulsory' façade and open space refurbishment, the client has decided to experiment with a so-called 'Renew your home' campaign, offering the tenants the opportunity to renew their home with e.g. balconies, which they themselves have to finance through a modest increase in the monthly rent.

Figure 41. The renew your home campaign (Gottlieb; 3B fællesadministration, 2005: 37).

This initiative is seen as a crucial element in the overall project and also plays a conspicuous part in the actual design and construction of the project, as the client has expressed concerns that tenants are given as much time as possible to decide for or against purchasing additional options, making logistics etc. very crucial as the contractor effectively is given only one month of notice in relation to the exact number and placing of the number of individual choices before having to start work. For this reason, as well as the client's wish to further the development of the sector's *new-industrialisation* efforts, the façades are designed as so-called system deliveries, i.e. standardised, semi-prefabricated units, which are flexible enough to support the different solutions chosen by the tenants.

Mechanisms of legitimacy and catalysts for change

Shifting the focus to the overall organisational aspects of the project, one thing that crystallises rather clearly is the way in which a wide range of responsibilities are sought placed at or transferred to the production team by use of an array of development activities or concepts – championed by the notion of occupant participation and democracy. Thus, if one should characterise the U2 project with but a few words 'construction developmental laboratory' would spring into mind due to the scale and scope of different development initiatives and activities taken into play. Start by observing the following illustration taken from (Bertelsen, 2008; author's translation):

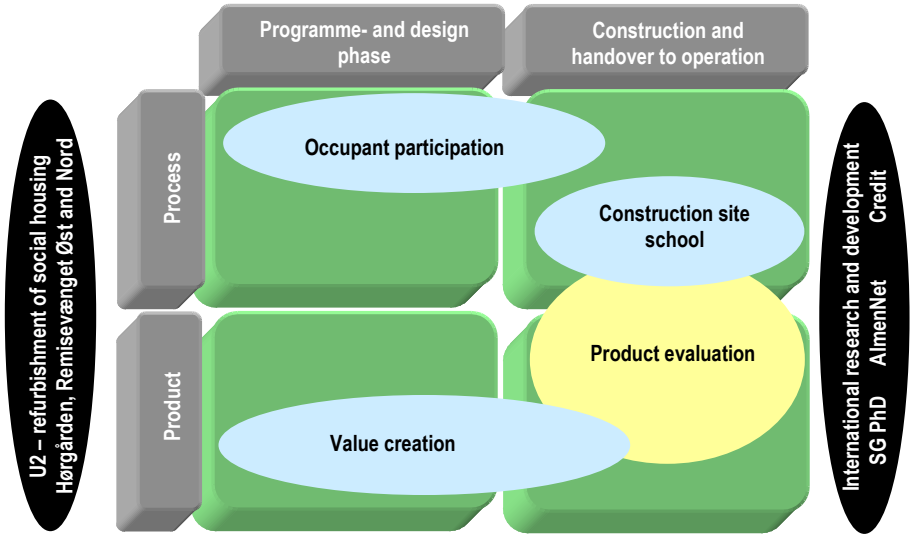


Figure 42. Development activities on the U2 project (Bertelsen, 2008; own translation)

This figure illustrates the different developmental or experimental activities on the U2 project grouped according to their temporal placing in the construction process as well as in relation to their focus on either processes or products. However, this latter division should be taken with some caution, as there is an intricate relationship between the two, and as one of the directors from the contracting company noted at the kick-off workshop: "*If you do not change the process, how can then expect to change the results?*[25]" The four groups of activities can be seen as interdiscursive links, i.e. relations between the discursive formations (Foucault, 1972/2006) of building politics and the actual 'programming' of the project, as will be further discussed in the next chapter. The work with these four themes was thus proposed to take place

[25] Lars Jess Hansen, Enemærke & Petersen, Kickoff workshop in Ringsted, March 27-28 2008.

in the form of a testing of a string of recommendations put forward in a 2007 status report from the *PLUS-network* (PLUS-netværket, 2007). Here, a total of ten recommendations are proposed, five of which are taken up in the U2 project being (as numbered in the application):

1. Partnering and value-based optimisation of process and product.
5. Partnering and the users' perception of building values.
6. Toolbox for facilitation of the partnering process.
8. Partnering and the site as learning-arena.
9. Documentation, analysis, learning, evaluation, and reflection.

These recommendations constituted the back-bone of the development activities as they were described in an application (U2, 2007a) to BoligfondenKuben[26] concerning the funding of a project aiming at developing *i.a.*: *"…new knowledge on learning and reflection in partnering as well as on value optimisation"* (U2, 2007a: 5). This agenda explicitly finds its source of legitimacy in two places. First of all, within the framework of the residential democracy process where the tenants, together with the construction client and his process consultant, at the preliminary workshop in January 2004 laid down the overall success criteria for the project. Here it was stressed that the product should become reference for other refurbishment and area development projects, and that work on-site should be conducted as surgical incisions – i.e. that the site should be established on the resident's premises rather than on the premises of the rational production process. Secondly, the agenda is legitimised with explicit reference to five different initiatives, networks or organisations launched within the previous ten years, being AlmenNet, PLUS-Network, BygSoL, The Foundation for Cheap Housing, and Lean Construction DK[27]. This can thus be seen as yet a continuation of the contemporary 'Danish model' of what could be called the *quasi-institutional embeddedness of proto-political sector development*. With this I mean a situation where specific actions are guided by attempts to reject the totalising effects or dynamics of the traditional *disciplinary,*

[26] An independent institution supporting development initiatives in the Danish construction sector.

[27] AlmenNet is the social housing associations' forum for development, learning and renewal (www. AlmenNet.dk). PLUS is an open network of clients seeking to advance the development of better buildings and collaboration (http://www.boligfonden.dk/index.php?id=219). The Foundation for Cheap Housing is an ongoing initiative to build 5000 cheap homes in the City of Copenhagen. (http://www.billigeboliger.dk/). BygSoL – Collaboration and Learning in Construction was a project-based consolidation of companies, trade organisations, and research institutions working towards creating a new and improved building process (http://www.bygsol.dk/). Lean Construction-DK is an association working at promoting lean construction principles in Denmark (http://www.leanconstruction.dk/).

juridico-discursive apparatuses of construction by continuously opening towards a highly dispersed goal – trust, communalism, etc. (the *proto-political* dimension), and that these specific actions are set-off in and legitimised by forces outside or between the immediate *juridico-discursive* apparatuses (the dimension of *quasi-institutional embeddedness*). In other words, the very discourse on sectoral development provides the legitimacy to engage in a highly experimental endeavour. As for the concretisation of the agenda, an intricate relationship is envisaged:

> *"The parties acknowledge that the safeguarding of an optimised value creation based on exchange of experiences, continuous learning, and knowledge exchange in the complex partnership organisation of the project [see below] necessitates the development of learning- and reflection competencies as well as a well-functioning communication, i.e. the application of well-known and new forms of logistics in relation to process management and production planning." (U2, 2007a: 4; own translation).*

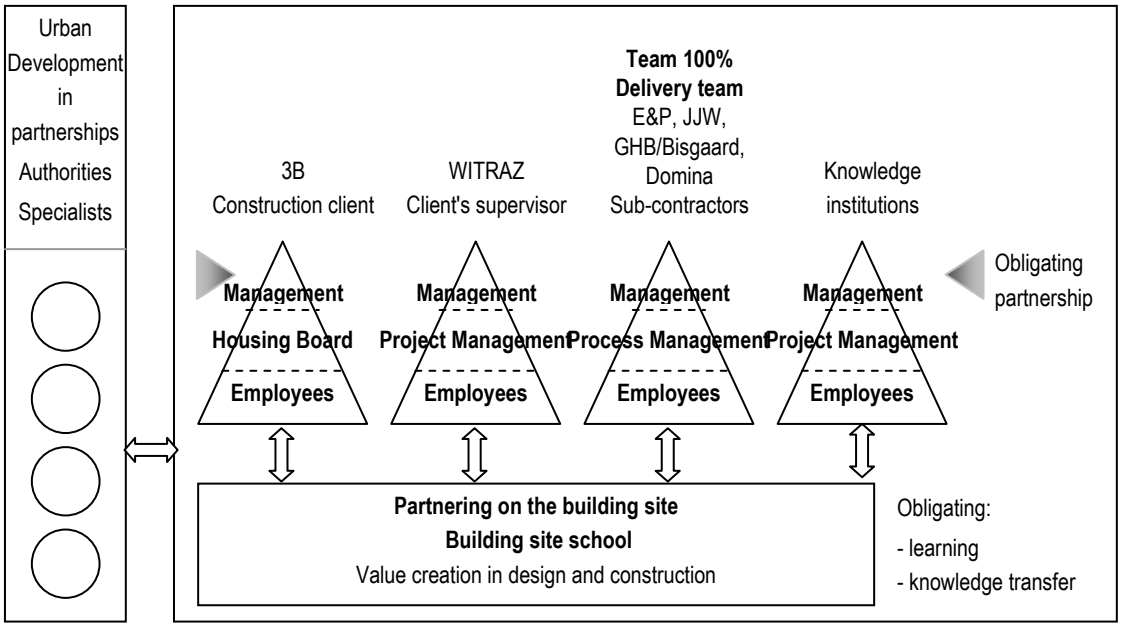


Figure 43. The complex partnership organisation (adapted from U2, 2007a: 4)

In particular, the transfer and development of new competencies as well as the interconnectedness of the different initiatives are seen as crucial in fulfilling the programmatic intentions. The plethora of different initiatives is conceptualised as a closely coupled system knitted together by obligation; an obligation *"…not primarily in relation to a specific exchange"* as Andersen (2006: 15) would put it, but rather in relation to an imagined future. Hence, rather than seeing occupant participation, product evaluation, value creation, and the building site school (to name but a few of the formal initiatives taken on the project) as isolated instances of development

in which singular cause-effect relationships can be deduced, it is the messy totality of the efforts that bears the element of change. Thus, even though the product hopefully should be improved, the occupants more engaged and the value creation improved through the use of the different initiatives, the idealised or intended goal is located elsewhere and is much more dispersed – being that of 'change' generally speaking. Accordingly, the following objectives are envisioned:

Table 18. Objectives for the development process (U2, 2007a: 4)

Objectives for		
Physical refurbishment	**Building process**	**Occupant-participation**
— Optimise product values in all phases — Make the UrbanPlan functional and architectonical up-to-date — Value creation in architectural expression and functions, making the housing area a benchmark for future projects — Create good indoor climate and living-quality — Keep within the budget frame	— Optimise value creation in all phases — Make the building phase a pleasant experience for contractors and tenants — Focus on sense of security in the area — Proud craftsmen — Collaborate with the local facilities management — Abide to agreements — Few complaints from the tenants — Do it in a new way – never doing what we usually do, just because we are accustomed to — Create a building, collaboration, dialogue and learning process, which sets the standard for other projects	— Increased opportunities for the individual tenant to customise own apartment — Provide insight and maintain influence in decisions — Provide room for diversity — Provide speaking time for all in an open and trusting dialogue — Proud and satisfied tenants

The ideal figure of change is especially evident when observing the building process objective '*Do it in a new way – never doing what we usually do, just because we are accustomed to*' as well as the objectives related to the element of benchmarking, i.e. '*Create a building, collaboration, dialogue and learning process which sets the standard for other projects*' and '*Value creation in architectural expression and functions, making the housing area a benchmark for future projects'*. As for the first, it seems that challenging accustomed practices and methods just for the sake of it is legitimate and an objective in its own right. As for the other objectives, setting standards and aiming at being the benchmark for future projects of this type clearly represents an attempt at installing a normalising governing technology (Triantafillou, 2006); that is an attempt at continuously using the normal (the realised) as the basis for the structuring of negotiations on how to act. This will be further elaborated and discussed in the next chapter; however for the time being, I will briefly point to an aspect hereof, which will function as a starting point for this subsequent discussion. In order to reach these objectives two

different approaches are taken, neither of which, I suggest, should be seen as instrumental realisations of some governing actor's intentions, but rather as social technologies, which create the conditions for management based on the actors' capacity for self-control (Otto, 2006; Triantafillou, 2006). First, we have the establishment of an obligating partnership at a 'management level' guided by the use of the method described in the AlmenNet guide to occupant democratic processes (AlmenNet, 2007) as well as a method called *Innovation and Degrees of freedom* (U2, 2007a: 8), which aims at developing new knowledge in relation to when most value-for-money is created in an open/innovative respectively closed/planned process. Secondly, on a local level, we have the establishment of an obligation towards learning and knowledge transfer. This is to be achieved by use of an evaluation concept for craftsmen with focus on building parts, as well as through a series of building-site-school meetings, in which craftsmen and management together discuss and decide how to navigate their way through the project and achieve the stipulated objectives.

9. Smooth space as actualisations of partnering

Previously I have used the term 'stratification' for describing the spatial ordering of the traditional construction sector, invoking the phase model as the diagram of this ordering. From here I proceeded to conceptualise partnering as *a logic of exemptions* to the ordering imposed by the phase-model. In this chapter, I continue by examining a series of events in the actualisation of partnering drawing on the *Deleuzo-Guattarian* notion of the *smooth* and the *striated* (or stratified) space. My basic argument is that partnering actualises a smooth kind of space through the problematisation of hierarchies. This again actualises flexibility, outsourcing of control, and individual responsibility and ownership as central means in the handling of social order.

9.1 Alluring discourse or rational governance?

It seems there is something alluring about the discourse of collaboration, which is somewhat difficult to pin-point, yet has profound implications when observed from a *Foucauldian* perspective in the light of what could be called the problem of social order (Clegg *et al.*, 2002: 318). With Clegg *et al.*, and as discussed previously, I argue that construction projects traditionally have been carried out in accordance to a fairly rigid contractual structure in which different social actors perform their roles in accordance to series of well-established *juridico-discursive* rules. This carries the implications that a specific project is born with certain constraints that cannot be made subject to changes. This applies e.g. to the overall financing scheme, which is established early on in the process before the project is put up for tender; however also the different activities and areas of responsibility are somewhat pre-disposed by the framing of the model and the contractual set-up. Clegg *et al.* (2002) even go so far as to say, that traditionally projects are constituted by contracts whose enforcement:

> *"…is held in place by governance mechanisms that involve high degrees of work surveillance, to check that it is completed in accordance with the contract" (Clegg et al., 2002: 318).*

As I argued in the second part of the dissertation, these governance mechanisms are however not just practices of contractual surveillance or tools of management as

Clegg focuses on, although this also is important. In addition, they are embedded in the very social and material order of the project. This is why e.g. Kreiner (1978) in his studies of the certain social events related to the phenomenon of the site organisation can point to the existence of an ecologic situation of situations as well as a series of formal *objective* duties and rights, which are carried through as the overall pattern of interaction and organisation. However, there are several openings to the apparent pervasive disciplinary modality of construction. Reconsider e.g. first Foucault's argument pertaining to the norm and the normal. In the disciplines, the norm comes first directing the sociality towards its ideal. In the construction sector, speaking from the point of the tendering and selection process, lowest price would provide an appropriate example of how this works. This is discussed in chapter 9.2 below. Accordingly, today we see another form of control exceeding the so-called *carcèral* (prison-like) technologies of the disciplines. Even though the contracts (and other disciplinary governance mechanisms) still constitute an important part of the sociality of construction a new dominant normativity has crystallised – not as a substitute for, rather as a supplement to, law and discipline. In part 2 of the dissertation I have referred to this as negotiated practices. In the following I will make use of Foucault's concept of dispositives of security in explaining how it operates. As Foucault phrases it:

> *"So, there is not a series of successive element, the appearance of the new causing the earlier ones to disappear […] In reality you have a series of complex edifices […] in which what above all changes is the dominant characteristic, or more exactly, the system of correlation between juridico-legal mechanisms, disciplinary mechanisms, and mechanisms of security." (Foucault, 2007: 8).*

Using epidemics and town planning as examples Foucault identifies some general features of the dispositives of security pertaining to i.a.: a) space, b) the treatment of the uncertain, and c) the form of normalisation. Foucault advances the suggestion that whereas discipline works in *"…an empty, artificial space that is to be completely constructed"* (Foucault, 2007: 19), security *"…will rely on a number of material givens […] maximizing the positive elements, for which one provides the best possible circulation […] minimizing what is risky and inconvenient […] while knowing that they will never be completely suppressed."* (*Ibid.*, 2007: 19). Moreover, and perhaps more important is that dispositives of security works on the future with which Foucault, with reference to the *town*, means that it [the town] will not be planned or conceived:

> *"…according to a static perception that would ensure the perfection of the function there and then, but would open onto a future that is not exactly controllable, not precisely measured or measurable." (Ibid. 2007: 20)*

Likewise Deleuze and Guattari (1980, in Jensen, 2005b: 2) argue in their description of the post-disciplinary society that space is created by an act upon the given situation. Jensen (2005b: 2-3) further states that whereas discipline closes or structures space, according to a hierarchical and functional distribution of elements, the post-disciplinary *projective society* requires the re-opening of space to enable circulation and passage of an indefinite series of mobile elements. It is the management of these series of elements (by estimate of probability rather than constant and direct supervision) that is the essential characteristic of the mechanism of security (Foucault, 2007: 20). Discipline is in other words centripetal, whereas dispositives of security can be seen as centrifugal; as having the constant tendency to expand (*Ibid.*, 2007) and incorporate new elements otherwise bracketed off by the discipline's regulatory intervention. Discipline thus starts by circumscribing space in which: "…*its power and the mechanisms of its power will function fully and without limit.*" (*Ibid.*, 2007: 44); nothing is allowed escape in this space, and nothing is allowed to run its own course. In contrast, security prefers *laisser-faire* and relies on details that are not considered important in themselves in order to achieve something that is considered important.

In terms of social order, what this means is that whereas dispositives of law disposes order as: "…*what remains when everything that is prohibited has in fact been prevented*" (*Ibid.*, 2007: 46), and discipline adds the element obligation, i.e. disposes the things that must be done, dispositives of security let things take place, desirable or not, and respond only to the level of effective reality; "…*respond to a reality in such a way that this response cancels out the reality to which it responds.*" (*Ibid.*, 2007: 47). On this account, it is therefore hardly surprising that the question of normalisation differs between dispositives of security and those of law and discipline. In the latter, the norm is fundamental and primary in processes of normalisation or *normation* as Foucault here prefers (*Ibid.*, 2007). Discipline's stratification; its classifications, divisions, fixations, etc. is conducted with a view to *optimisation*, i.e. the ideal conception to be obtained. Security on the other hand, is exact the opposite of discipline. Rather than starting from the norm with reference to which the normal can be distinguished from the abnormal, the normal comes first in dispositives of

security and the norm is deduced from it – as an interplay of differential normalities; of different distributions of normality (*Ibid.*, 2007: 63).

What we in other words have here is something completely different from the discipline (*Ibid.*, 2007: 6) and following the thesis that a new post-disciplinarian dispositive of negotiation has begun to emerge, we could benefit from observing the rules and strategies put into operation from this perspective to see how legal and disciplinary technologies are superimposed and re-strategised by post-disciplinarian ones. Thus, extrapolating or rather re-contextualising these characteristics to the topic of this dissertation, we could ask how space, the treatment of uncertainties and the form of normalisation are staged and actualised in a partnering project.

9.2 Staging collaboration

There are two different contract award criteria available for clients in Danish construction: a) lowest price or b) economically most advantageous. If the client opts for lowest price, the assessment of proposals is a relatively straight-forward process. In most economically advantageous tender, the assessment of proposals is carried out based on a series of criteria pre-established in the tender document, making the assessment more complex. An important aspect of establishing the exact award criteria is that they have to have a certain conceptual attachment to the object of the contract. In other words, the criteria have to be relevant compared to the specific delivery of the works and can consequently vary with the contract in question. The specific award criteria must not give the client unconditional right to choose whichever offer he wants. This means that the criteria have to be precise and as is it said 'objectively measurable' (KS, 2006), implying *i.a.* that the criteria have to be final, unambiguous, and hence transparent. Thus, the regulative norm of optimisation embedded in the lowest price mechanism is short-circuited and displaced by a much more diffuse mechanism allowing for the negotiation of the norm. With legitimate basis in the so-called article 34 of previously mentioned European directive on the coordination of procedures for the award of public works contracts, public supply contracts and public service contracts (EU, 2004), the client organisation put the U2-project up for tender using the below contract award criteria (3B, 2006 5):

Table 19. Award criteria and their respective weights.

Award Criteria	**Weight**
1. Price formation model	25 pct.
1.a. Budget and rate base for settlement of phase 1	
1.b. Financial control methods	
2. Architectural quality and building technique	25 pct.
2.a. Quality – architecture	
2.b. Building technique – system deliveries	
3. The process	50 pct.
3.a. Organisation and staffing	
3.b. Collaboration	
3.c. Execution	

Although article 34 in the directive on the award of public works contracts is not an innovation compared to the preceding council directive (93/37/EEC) from 1993, which had its article 9 on the same topic, the legitimate award criteria have changed. In article 30 of the 1993 directive (EEC, 1993) it thus reads that when the most economically advantageous tender is used various criteria according to the contract can be used: *"e. g. price, period for completion, running costs, profitability, technical merit."* In the 2004 directive (EEC, 2004) it however lists the following criteria in the corresponding article 53:

> *"…for example, quality, price, technical merit, aesthetic and functional characteristics, environmental characteristics, running costs, cost-effectiveness, after-sales service and technical assistance, delivery date and delivery period or period of completion."*

This is a clear opening towards even more qualitative, and arguably increasingly subjective rather than 'objectively measurable' criteria. On the U2 project these criteria are stretched even further incorporating as the cornerstone a 50 pct. weighing of processual elements (see below). One of the most interesting features of the specific assessment process was the staging of a meeting November 16th 2005 at which the five different invited contractors and their teams made an oral presentation of their offer in front of an assessment committee consisting of two representative from each of the three construction committees[28] as well as from the facilities services, three representatives from the client organisation, and three representatives from the client's supervisor – a total of 14 persons.

[28] The fourth construction committee with 'jurisdiction' over *Remisevænget Vest* did not participate as their small scale refurbishment project was near completion at this stage.

Table 20. Award criteria – specific elements

Processual award criteria	Sub-elements
Organisation and manning	Comments and proposed modifications to collaborative setup
	Plan for staff continuity throughout the process
	CV's with professional and personal competencies
	Organisation adapted to the nature of the task
	Sufficient competencies to ensure proper and optimal completion of the tasks – especially in relation to communication with tenants
	Oral presentation of proposal and ability to collaborate and communicate
Collaboration	Methods and tools for inclusion of tenants and stakeholders
	Suggestion for activities to ensure team building in own and joint organisation
	Understanding of form of collaboration
	Expansions and additions to discussion paper on partnering
	Use of relevant tools in phase 1c, e.g. lean
	Specific suggestions to activities to retention of competencies in the collective team
	Specification of useful (and documented) methods for pro-active and dynamic user involvement
	Specification of method to safeguard the partnering collaboration from phase 1 to phase 2
	Specification of how to ensure team spirit in the further process
Execution	Optimal execution of the contract, e.g. through lean construction
	Plan for quality, environment and work safety
	Inclusion of relevant competencies at the contractors to ensure optimisation of the process
	Plan for use of tools (e.g. from lean) ensuring minimum waste and good communication
	Plan for use of simple, yet relevant procedures for documentation of proper technical quality
	Strategy for safe work environment in all processes demonstrated with specific exemplars.

The assessment committee evaluated the different proposal by means of a so-called assessment map as well as by the oral presentation. Based on the oral presentations, alone the assessment committee concluded that all teams would be able to solve the tasks in hand. Two teams however went on to the second round of the assessment process, including the team with the most expensive offer. Below I will report some statements related to the different proposals as a lever for the following discussion of the characteristics of the dominant rationality.

The problematic of hierarchy

> *"We deal with an organisation with short decision paths, where everything passes through a single person, who (according to the organisational chart) is the primary contact to the client and the process consultant. This form of organisation has its advantages and disadvantages. On this particular project, the assessment committee sees it mostly to be a disadvantage to work with such a hierarchical model." (3B, 2006: 17).*

The above extract is taken from the assessment report and does, I contend, provide a very precise or paradigmatic example on what is at stake (in terms of social order) in a partnering project. Speaking from a general perspective, the assessment committee saw the team as a *"…highly professional, yet markedly top down team"* (3B, 2006: 17; own translation) offering a classical approach to an untraditional project. As it was stated:

> *"They seem very competent; however not so open in their approach to new forms of collaboration and innovation in the processual aspects […] and their presentation resembled more a presentation of a series of companies, than a possible response to how the team in common would approach the project." (Ibid., 2006: 17; own translation)*

Absolute prescriptive certainty is disapproved, as it does not allow for the development of ever wider circuits, as Foucault (2007) would phrase. In this instance, partnering emerges as a centrifugal phenomenon, whose main strength is the ability to facilitate the constant integration of new elements.

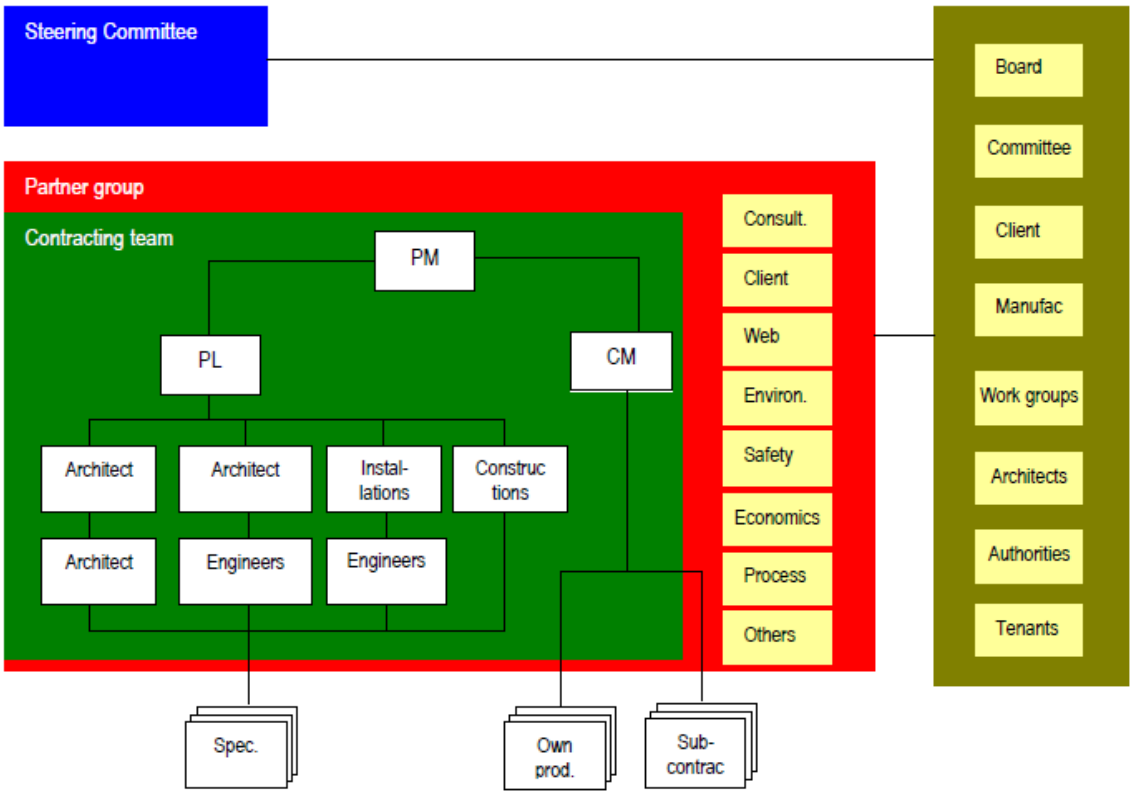


Figure 44. The disapproved organisation chart (3B, 2006: 17; anonymised).

Accordingly, continuing the above case and looking into the collaborative aspects of the project, the assessment committee furthermore expressed concerns as to whether the said team had understood the basic purpose of conducting workshops

throughout the project. The team had thus described in detail suggestions for eight different workshops throughout the duration of the project, which all were deemed relevant; however:

> *"…because they are described in such detail, it is easy to focus on all the workshops, which are not described. For instance, only one workshop, in which the tenants can propose new ideas for future initiatives, is described." (3B, 2006: 17; own translation).*

In contrast, the seemingly casual or non-obligating is favoured. Where I previously have used the *organism* and the *machine* as metaphors for the mould in which the sociality of the medieval and post-war building spheres were cast, *network* or *black box* seem appropriate to describe the idealised functioning of the U2 project.

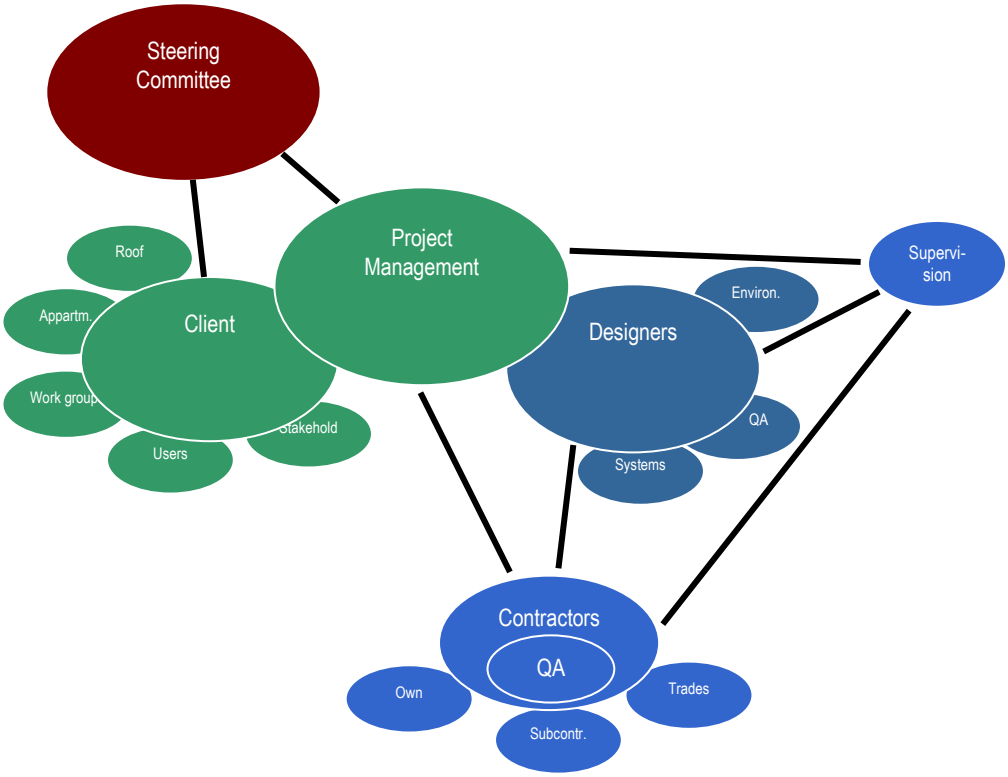


Figure 45. A networked sociality illustrated (3B, 2006: 6; anonymised).

The above chart constitutes the internal organisation of another contracting team as a partly overlapping, partly networked relationship. An interesting feature is the way in which (at least) three different ordering principles can be found: that of shape, colour, and connection. Thus, we immediately notice the use of circles/ellipses as opposed to squares and the absence of a centre as well as a top-bottom dichotomy, although the steering committee (the red ellipse) could be argued to have the upper hand. A distinction between the different spheres of responsibilities can however be

argued to be present, i.e. red colour designates the strategic decision makers, green (client organisation and joint project management) the 'tactical' level, and finally blue the operational level. From the chart alone it is however not possible to discern any contextual constraints, which suggest or determine how services, tasks, and activities are to be understood and conducted. I will look further into this topic in the next section. Finally, the organisation chart offers a series of connections between the different spheres. As first glimpse, it is difficult to tell whether these connections have been drawn at random, but giving the team the benefit of doubt, we notice that the connections, represented with lines, imply a formal exchange relationship between rather autonomous entities, whereas the overlapping ellipses seem to imply some sort of intersection/common denominator in which the boundaries between the different actors are blurred. This is especially evident when observing the satellites orbiting the client (left green ellipse), the contractor (lower blue ellipse), and the designers (centre blue ellipse). Furthermore we see the same feature in relation to the overlap between the project management team, the client and the designers. The above organisation chart is not a stand-alone example of how organisational aspects in a partnering project are conceptualised.

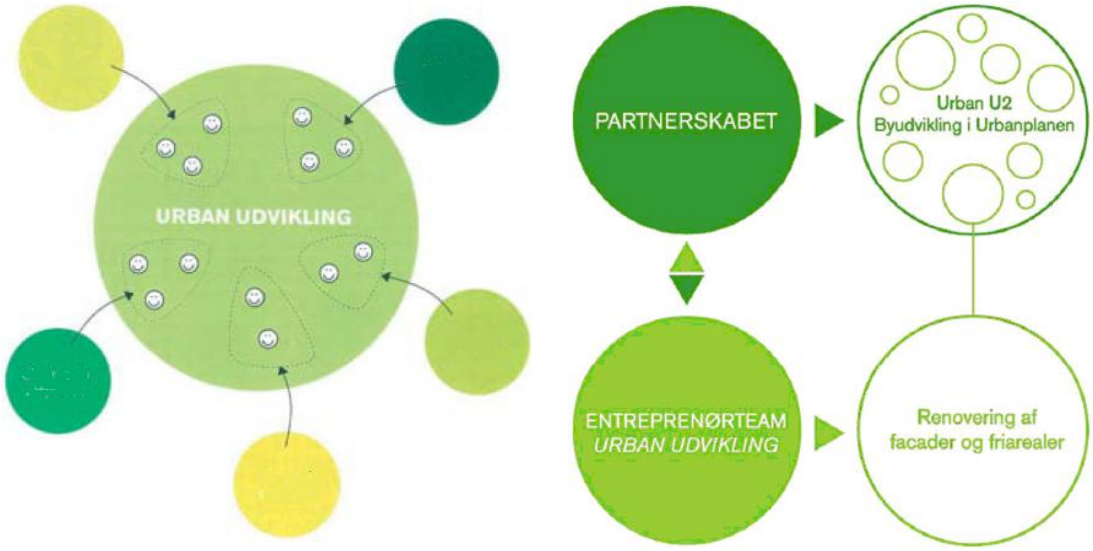


Figure 46. Team 'M' organisation chart and relationship to Urban Development in Partnerships (3B, 2006: 6, 15; anonymised).

Team 'M' also favours circles. Their picture is thus five circles, each of which represents one of the companies in the team, orbiting a central circle entitled 'Urban Development', which is argued to constitute a unity in partnering:

> *"It is a company consisting of representatives from the five companies. Assignments are manned based on the criterion of who is most suitable rather than on individual interests." (3B, 2006: 6; own translation).*

Here, as in the previous example, instead of promoting an organisational setup offering precise and unequivocal descriptions of areas of responsibilities and routes of communication, a highly 'open' organisation is envisioned. Thus, in the local organisation (shown to the left in the above figure) the central circle represents a mimicking of, or perhaps rather replication of, the overall pattern of organisation of the project, *Partnerskabet*, described as a:

> *"…a close and equal collaboration between the stakeholders of the area […] We match this partnership with a partnering model: Urban Development." (3B, 2006: 6; own translation).*

As for the winning proposal, and thus the focus for the remainder of the case, Team 100% (consisting of Enemærke & Petersen, JWW, GHB+Bisgaard, Domina, and First Info) conceptualised their proposal for organisational set-up is conceptualised as follows:

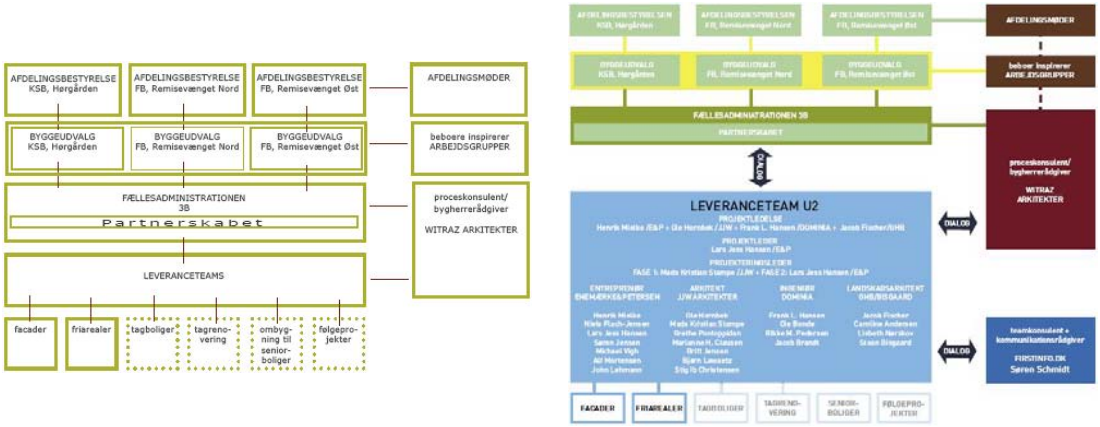


Figure 47. Client's and Team 100%'s organisation chart (3B, 2005: 32; 3B, 2006: 14).

We immediately notice the absence of circles, which however is weighed up by the type of connections and social relationships proposed. By and large, the organisation chart is similar to the chart provided by the client in the tender material; however with a few modifications. Thus, the type of relationship between the delivery-team (da. *Leveranceteams*) and the partnership organisation (da. *Partnerskabet*) respectively the process consultant/client's supervisor (WITRAZ architects) is conceptualised as a 'two-way dialogue', which coincidently also is the preferred form of relationship between the team and its *team consultant/communication advisor*. Within the team itself, no details are enclosed as to the formal relationships

between the participants apart from the fact that the project management responsibilities are with the architect in the creative first phase (design) and with the contractor in phase two, where the on-site work is conducted.

This is clearly a break from earlier recommendations promoting the necessity of one (and only one) management function (the so-called *unity management*) if effective production is to be achieved (SBI, 1968: 12). Here, with reference to the individual trade contract (da. *fagentreprise*), it is also stated that in so far as managerial tasks are shared a general avoidance of responsibilities will arise. Taking the U2 case as an indicator for the circumstances surrounding a partnering project, shared responsibilities are however favoured as the principle of management. In the assessment it is thus seen as a strength that:

> *"The team has provided a series of specific and novel proposals to ensuring continuity; [e.g.] actually delegating responsibilities. Proposals which call for a different dynamic in the team." (3B, 2006: 14; own translation).*

Taking a critical stance one could ask, at what cost this quest for creativity, dynamics and flexibility comes? If we take the above example on the concretisation of partnering, in the form of these highly organic organisational setups with their favouring of the seemingly non-obligating and disliking of the unequivocal, which has been made possible by the use of e.g. article 34, then how can any degree of certainty be upheld? How is the use of highly subjective criteria legitimised on a local level?

According to the client's supervisor, the very use of these more subjective criteria in the selection of contracting team is the aspect that constitutes the intentions of the project and the partnering process as legitimate:

> *"Client's supervisor: Well, I believe it is problematical not to use subjective judgements – particular when it's such a large project. When you have to shape it [the project] so much according to the process and trust…because it is a partnering [project] with early contractor participation, the process in itself is the most important element – and as such it [the choice] is fully deliberate."*

Also from the contractor's perspective there is acceptance of the use of subjective judgements for the basis of the selection of partners; an acceptance rooted in the general circumstances governing the construction sector today. Thus, being able to perform 'soft' criteria is a competitive parameter:

> *"Project director: It is not only lowest price you can assess, but also how you plan logistics. On a partnering case like this you make an offer without really putting a price on it…however you describe the orchestration of the project: e.g. collaboration, safety, logistics etc. […] it is a competitive parameter. It might very well not be an actual demand; however when the client has a large partnering case and has to choose, we believe that the more innovative and focused you are on the soft issues […] the more important it is."*

Acknowledging the largely subjective nature or at least the uncertain character of the basis of decision *vis-à-vis* the traditional methods of selecting partners, the client's supervisor stressed the importance of conducting a thorough qualitative evaluation. This takes the form of an assessment report followed up by extensive dialogue with the different bidders to avoid any misconceptions on the grounds of contract award:

> *"Client's supervisor: It is difficult to measure [the criteria for contract award in a partnering project] so we had many discussions [with an external evaluator] on how to measure – should we use curves or matrices – you can't do that [with qualitative criteria]. So it is very subjective, and what we chose to do was to take it very, very seriously and write an assessment report, which made it absolutely clear for the bidders that we had evaluated and compared the offers very thoroughly. And we have actually received much praise for this. Some who have lost have said that they really appreciated the assessment report as they themselves could evaluate the project."*

What we in other words have here is an apparent, widespread acceptance of an absence of prescriptive certainty as the basis for contract award. Thus, we have no attempt to position *optimisation* as the guiding principle in the programming of the project – optimisation in a traditional sense that is, being the attempt to situate an *ex ante* static norm that would ensure the perfection the project. Rather, we see that optimisation efforts are directed towards the much more diffuse concept of '*value creation in all phases*' (U2, 2007a: 4) – an objective located in the future and to be reached via routes not quite planned and known. Thus, in this perspective partnering, as a form of governance, emerges as an apparent choice if flexibility is favoured at the expense of control. This being said, control still plays a prominent role; however in another form than the traditional centralised form. Control is rather re-strategised as a form of self-control by means of an attempt to instil a sense of 'project-ownership' as the ideal towards which project participants must be directed. This also includes project participants who traditionally speaking would not be the target for such considerations. As such, partnering actualises flexibility

through a delegation or displacement of control from the sphere of central management to individual conduct.

Flexibility and the displacement of control

I now turn my attention to another aspect in the staging of partnering, where we can see the unequivocal façade of the traditional disciplinary construction practice crumble – that of roles and responsibilities in relation to the question of flexibility and the displacement of control. Roles and responsibilities are as ever important topics of concern in partnering projects as they are in 'traditional' projects. The main difference between these is however that whereas unequivocal roles traditionally speaking have been preferred (or should I rather say disposed), in partnering this hegemonic conception has been opened. Thus, in partnering whenever a single and central point of control is present, it is highly problematic – or so it seems on this specific case. Linking the notion of the aforementioned hierarchical structure with that of roles and responsibilities, the client's supervisor explains:

> *"Client's supervisor: The danger of the hierarchical structure was that everything landed on the person in the top. You got the expectation, through their way of expressing themselves in writing and their way of performing; that it was only this person controlling the project."*

The problem however, is not so much the hierarchical structure or the single point of control (as it was phrased) as such. The problematic is framed explicitly in the context of the precondition, i.e. of the partnering/partnership ideal:

> *"Client's supervisor: That is was only this one person controlling the project made us somewhat worried when considering it was a team, which should work out there for a long time designing and talking to a lot of people […] it wasn't in this spirit we felt the project should be run."*

What then is this spirit being referred to? Using the various interviewees as 'accounts of truth' as to what constitutes the proper spirit for a partnering project, we could emphasise the following concepts[29], which will be further elaborated in the context of roles and responsibilities:

- Non-traditional.
- Dynamic and continuously evolving.
- Ownership to the project.

[29] These concepts are a collection of statements put forward in the interviews with the client's supervisor, the project director, the project manager and the appointed external evaluator.

– Free dialogue.

We immediately notice the presence of the concept of the non-traditional, which at first glance appears as a contradistinction to unequivocality and the attempt at planning a course of events:

> *"Project director: You cannot draw a traditional organisational chart from the beginning. Who is in control changes throughout the process – it is dynamic."*

Although it can be argued (as it is in the second part of the dissertation) that the 'traditional' construction process was not unfamiliar with the notion of dynamics, there is a subtle difference. Where we previously had decentralised *responsibilities* in relation to the various parts of the production, i.e. that different actors were legally responsible for their own limited tasks, *control* was to be placed at one and only one actor if efficient production should be maintained. In the previously mentioned 1993 business economic analysis (EfS, 1993: 91-93) this problem of the unequivocal placing of control is re-articulated:

> *"In those instances where general contracting or turnkey contracting principles is used, which in theory entails that one company assumes control of the production, this often occurs too seldom." (EfS, 1993: 91; own translation, emphasis added).*

What *did* happen in practice, according to the report, was that each company assumes responsibility only for their own contracts leading to sub-optimisation. As previously mentioned, the response was to instigate increased vertical integration between the different companies, creating economically motivated and legally binding collaborative arrangements as a means of ensuring compliance to the whole (the project) instead of the part (the specific contract). We could call this a largely *juridico-discursive* formation of subjects characterised by a negative relation between power and the social actors of the project, i.e. 1) that actors are something that power constrains, 2) that actors can only be treated and understood within this frame of power; and 3) that roles and responsibilities are taken-for-granted. Take as an example the following site organisational statuses proposed by Kreiner (1976).

Table 21. Site organisational statuses (Kreiner, 1976: 141-146).

Position	**Duties, rights and formal, behavioural expectations**
Client's supervisor Typically: Architect or Consulting Engineer	Duties: 1) vis-à-vis the client: to protect the client legitimate interests throughout the production process, but vis-à-vis the site manager/agent: to accept the contractor's legitimate interests (the source of legitimacy is the contract). 2) to keep the parties informed about the opponent's intentions and attitudes. Rights: — to inspect and evaluate, to accept or dismiss the contractor's work on the site or elsewhere — to control the release of the negative sanctions with which the client was equipped through the contract — to have the site managers/agent's cooperation in fulfilling his duties to the client. Formal, Behavioural Expectations: — to call and preside over the site meetings with the responsible site manager/agent. — to make requisitions on the contractors for samples of the materials used and/or the workmanship. — to keep accounts of the project.
Site Manager Typically: General Contractor or Architect/Consulting Engineer	Duties: 1) vis-à-vis the parent organisation: to carry out the technical and quality control as well as the auditing, and further to coordinate the contractor's effort in order to ensure efficient modes of production, but 2) vis-à-vis the site agents: to defer to the contract that the contractor and the client have agreed upon. Rights: — to review the contractor's plan, and to accept or dismiss them on grounds of their fitness to the site organisational functioning as a whole. — to inspect and control the implementation of the plans. — to change the plans in contingency situations. — to control the release of those negative sanctions with which the parent organisation was equipped through contractual agreements. — to have the site agent's cooperation in fulfilling his duties vis-à-vis the parent organisation. Formal, Behavioural Expectations: — to produce the information needed at the site meetings. — to negotiate changes in the project with the site agents. — to negotiate, review and authorise the site agents' request for payments on account and additional payment. — to have tests of materials and workmanship performed. — to record and to file records on the progress of the project.
Site Agent Typically: Sub-contractor or Contractor	Duties: 1) vis-à-vis the parent organisation: to supervise and coordinate the performances of the teams in order to ensure efficient modes of production, and to protect the interests of the (sub-)contractor within the limits defined in the contract. 2) vis-à-vis the site manager: to keep him informed about emergent contingencies which may influence the efficiency of the site organisation as a whole.

	3) vis-à-vis the teams: to defer the conditions stated in the lump-sum contract (or the like) and to the traditional rights of the craftsmen. Rights: — to supervise and lead the work performed on the site. — to implement alternative plans as long as the terms of exchange (and employment) are not changed. — to have un-involved experts to evaluate the performance with respect to time, quality, and adequacy. — to fill in the contract between the client and the contractor on matters not specified explicitly. Formal, Behavioural Expectations: — to participate in site meetings. — to plan the performance, and to see to it that the plan is implemented. — to negotiate changes in the projects with the site manager. — to write requests for payment on account and for additional payment, and to negotiate these with the site manager. — to record and file information relevant to the progress of the work.

The formal rights, duties and behavioural expectations in the above table functions according to Kreiner (1976) as the basis on which the site organisational members act. Rights ascribed to one position (actor) are the duties of another, and:

> *"…a perceived freedom of choice is either a result of the actor's ignorance or a result of his belief in environmental ignorance concerning his fulfilment of obligations." (Kreiner, 1976: 174).*

In contrast, partnering and partnerships seems to be generative rather than conserving in that they have the ability to produce, to create new forms of subjectivity. This is a viewpoint backed by Foucault, who sees power not simply as negative and repressive; it is also positive and productive. Power is thus not just law-enforcing or correcting; i.e. *subjecting* meaning that an individual or collective is proclaimed subject – that is given a specific position from which to act. Power is also *subjectivating*, i.e. tempting; offering a specific position to be taken or rejected. Andersen (2003: 24) distinguishes between subjection and subjectivation by arguing, that the former: "…*signifies the space where one receives oneself*" whereas the latter "…*signifies the space where one gives oneself to oneself.*" Using the present case project as an example I think the attempts of creating ownership to the project, as we shall see below, is an example of the latter form of exercise of power; an attempt to smooth out the stratified space of construction in order to break down some of these site organisational statuses or roles, which have developed as a consequence of the dispositive of rationalisation. Especially the re-articulation of the role of the craftsmen and the site management function will be discussed below.

10. Order and social technologies

> *"For us, then, particular spatialisations are thus the products of such a phenomenotechnics – of techniques and practices that try to conjure up in reality that which has already been conjured up in thought" (Osborne and Rose, 2004: 212).*

In the previous chapter I looked into a series of *thought-representations* or *visibilisations* of partnering. I have demonstrated the means by which smooth space is actualised on the project. We have as an example the contract award criteria promoting architectural and processual qualities in favour of strict financial concerns. Furthermore we have the organisation charts, which are probably the most prominent visibilisations of smooth space. Finally, I have pointed to the consequences hereof, namely the outsourcing or displacement of control and coordination by instigating ownership as the guiding principle of sociality.

In this chapter, I will take the analysis a step further and explore how smooth space actualises (conjures-up-in-reality) a series of gestures or social technologies in the specific context of the project. I put special emphasis on how the order of the idealised smooth space is handled in the project. In doing so, I report and analyse some direct observations from differently situated and staged contexts in a specific building project. The data was collected in order to shed light on a distinct social event in the project, namely the arranged co-presence of different actors in specific delimited settings, which taken together constitute the sites of investigation of the U2 project:

– The kick-off workshop.
– The bi-weekly site meetings.
– The weekly planning meetings.

The reason for this focus is that I think that we with some certainty can argue, that meetings (as loci of arranged co-presence) are the topographical sites, which are marked out and have 'salience for investigation' (Foucault, 2003) when speaking of partnering. As we eventually will see, this delimitation is certainly consistent with the observations carried out on the project.

10.1 The kick-off workshop as a programming of order

In terms of strictly discursive events, one of the most prominent examples of the new logic of negotiation is the kick-off workshop, which constitutes a very important part of the partnering phenomenon. In this chapter I argue for the kick-off workshop to constitute a social technology aimed at aligning the different stakeholders of the project according to a new ideal of negotiation. I will especially focus on how traditional roles are sought displaced in an attempt to constitute the craftsmen as co-responsible for the project in general.

The workshop was held over two days in the beginning of 2008 at the main-contractor's headquarters. A total of 50 project members and stakeholders participated in the event. The reason for putting it this way, i.e. stressing the difference between project members on the one hand and project stakeholders on the other hand, is the rather heterogeneous assemblage of different people participating. We thus had the presence of seven permanent employees from the contracting company, 22 craftsmen, four subcontractors, two architects, one consulting engineer, three teachers/facilitators, two external project evaluators, and finally nine client representatives, including four tenants and two employees from the partnership secretariat. Let us start with the observing the agenda for the workshop (or two-day seminar as it was called).

Table 22. Agenda for the two day workshop (U2, 2008; own translation).

Time	Topic
Thursday 27 March 2008	
09:00	Welcome and introduction
09:20	Creative, practical collaboration exercise
10:00	What to build and the thoughts behind
11:30	Lunch
12:15	The project and site value base – attitude towards responsibility, collaboration and quality
14:00	New ideas to strengthen the cross-disciplinary collaboration (physical outdoor exercises)
16:00	Break
16:30	User participation in the refurbishment process – so far and in the further process
17:30	Walk, hotel registration
20:00	Event – surprise and social gathering
Friday 28 March 2008	
07:00	Breakfast
08:00	Walk
08:30	A look back to yesterday's events
09:00	Collective learning on the site – what is it?
10:00	Break

10:20	What will happen in the further process on site?
11:00	What will take place in the building site school?
12:00	Lunch
12:45	The building site as a learning arena – what does this entail for site management and craftsmen?
14:00	Evaluation – and a final word from the teachers
14:30	Coffee and trip home

The workshop represents the *centrepiece* of partnering – the central social event of the phenomenon. As a site of observation it thus provided a good sense of both how the possible openings provided by partnering were handled in practice, as well as of the pervasiveness of what could be called the popular discourse of partnering, promoting concepts such as collaboration, trust, teambuilding, learning etc. If we follow Clegg *et al.* (2002: 324) it could be argued, that what we were witnessing on the workshop was an attempt to create a 'Designer Culture' for the project – an attempt at programming a social order reaching into the future of the project. Clegg *et al.* (ibid.) cite Casey (1996) for the following characteristics of a Designer Culture:

1. Individual enthusiasm manifesting values of dedication, loyalty, self-sacrifice and passion for the project.
2. Discourse characterised by a familiar language of team and family.
3. Public display of the designer culture.
4. Strong customer focus.

Starting from the bottom, the presence of strong customer focus was evident. The overall partnership theme '*occupant democracy without borders*' was at this local level translated into the presence of four tenants and two partnership secretariat employees. The purpose of including these in the workshop can be seen as three-fold. First, it can be seen as a question of empowering the U2 community as such, providing the tenants as such with the necessary competencies to participate in the decision-making processes and make technical changes to the project. Secondly, the user-participation can also be seen as a way of illustrating the harsh realities of a project, thus aligning the expectations of the tenants with what is actually possible or feasible. Thirdly, introducing the tenants at the meeting can also be seen as way of making the craftsmen reflect on the upcoming tasks – making the project everything else than just-another-project. Based on the observations both at the workshop and during the 10 months I followed the project subsequently, we can question the first of the above suggestions, as all design solutions had been

established and the tenants only had the opportunity of deciding for or against purchasing additional options as discussed previously. Furthermore, as a specific outcome of the two-day workshop it was decided that the tenants should participate in the following fortnightly site meetings during the actual construction phase of the project; however this intention was never realised for several reasons, most prominent of which according to the site manager was the level of specificity of the subsequent meetings – that the tenants would not be able to contribute nor benefit from the meetings[30]. At the workshop the second suggestion was not discussed much, although it was a recurrent theme at the sub-sequent meetings on-site. No doubt should it be disregarded that this is a plausible explanation for the inclusion of the tenants; however as the workshop and the project unfolded, the third suggestion seem more prevalent, as I will discuss further below.

Looking at the public display of the designer culture, several examples of symbolic signalling were present. Take for instance the below image.

Figure 48. Water bottle with label reading: "Water for collaboration" (Vand til samarbejde).

Whether we, on a critical note, should see this as a contemporary interpretation of 'snake oil' or not, the bottle (although seemingly modest) nevertheless encapsulates the atmosphere of the séance as such. The participants were seated in groups around smaller table in order to facilitate group exercises, discussions and small talk.

[30] Interview with site manager 27.05.2008.

Group exercises alternated between 'intellectual' tasks as well as physical/outdoor activities and were carefully scripted according in relation to each other and to fit the basic purpose of the workshop, being:

> *"…to create a common understanding of how everybody on-site and in the project organisation can contribute to the value creation, optimisation of process and product, creation of new knowledge and experience through a systematic experience gathering, on-site learning, based especially on the Lean-approach and Kaizen and a good co-existence with the tenants and the surroundings." (U2, 2008: 1, own translation).*

Presentations were either given in advance of an exercise in order to prepare the participants or after an exercise, in which case the participants were told how they *really* should interpret what they just had been experiencing – indicating that some interpretations (that of the management and the teachers/facilitators) are more true/relevant than others. As an example of the former order, prior to the '*creative, practical collaboration exercise*' the participants were divided into four mixed teams and told to come back with three statements on how the exercise related to their working life. After trying to balance a team through a course consisting of intermediary stepping stones without touching the ground, the following statements were given on the lessons learned:

The exercise	Lessons learned from the exercise
	– the necessity of sticking to the plan – collaboration is paramount – avoid taking chances – learn from previous experiences – clear communication is needed – willingness to adapt – learn from others – keep a steady rhythm

Figure 49. The first physical exercise of the workshop and the lessons learned

These statements seemed to be well received and sparked no further discussion - with the exception of the last one, which as discussed in the second part of the dissertation gave rise to a discussion concerning the relative importance of rhythm respectively innovation, or in other words interdisciplinary respectively specialist knowledge.

The second example pertains to the physical outdoor exercise entitled '*New ideas to strengthen the cross-disciplinary collaboration.*' The stipulated purpose of this exercise was according to the facilitator:

> *"Facilitator: to strengthen collaboration by means of cross-organisational and process-oriented work hereby reaching a mutual understanding of each others work. We wish to become flexible, efficient and responsible employees through participation and ensure continuous and relevant communication, information and acquisition of more knowledge through education." (Own translation).*

In specific, the following elements pertaining to collaboration in relation to the exercise were presented:

- The opportunity to make use of one's knowledge.
- One should have influence on the planning of work.
- Joint decisions entail faster workflow.
- Collaboration entails a more fun working day.
- When everybody assumes responsibility, things work out better.
- We keep our promises.

After a game of hockey-slalom the participants reassembled and were given a presentation prepared by the process facilitators, in which the exercise was re-contextualised in accordance with the main message that '*the craftsmen are given a more prominent role.*' This in essence transferred the element of a common obligation of collaboration to the craftsmen, as can be seen from the below statements taken from the presentation:

> *"Facilitator: The craftsmen will assume a much more prominent role. They will participate in planning meetings with the management, in site meetings, in resolving conflicts, and they will follow up on time schedules." (Own translation).*

> *"Facilitator: As the craftsmen are included and noticed, they will assume ownership of the decisions. They have promised their colleagues that they will finish at a certain time or will abide to some common rules that they themselves have determined. And if one personally has promised something, one has to keep this promise, if one is to maintain the respect of one's colleagues." (Own translation).*

Now this is a clear example of how a post-disciplinary exercise of power is conceptualised: as an attempt to constitute the craftsmen as responsible subjects.

Responsible, however; not only for their own specific tasks traditionally speaking considered their formal area of responsibility, but also for managerial tasks as well as their own personal behaviour or conduct. This is a conduct not specified ex ante as an absolute ideal towards which the craftsmen are directed, rather a conduct negotiated on the basis of the situation in hand. When this is said, there was however also focused on the implications of this sought-after new role of the craftsmen for the other participants:

> *"Facilitator: That the management and the craftsmen can meet and discuss the project is also contributing to the improvement of the methods. The craftsmen are the ones building what the engineers' have designed and this can only result in a good talk, which there only seldom has been room for previously. The engineers and architects are now confronted with the question whether their solutions are buildable or problematic." (Own translation).*

This question however quickly turned into a discussion pointing back at the role or conduct of the craftsmen:

> *"Architect: There is a conflict built into a project like this. The good intentions are on a collision course with the piece rate system, which is pulling in a different direction. I mean, the craftsmen are very often interested in making as much money as possible and thereby undertake average work and only assume responsibility for their own specific part of the process […] however it is worth discussing that there is an in-built conflict in the very way we organise ourselves in the building world. I mean, it has been like this ever since we in the 60s invented these piece rate systems – it has ruined much in Danish construction. "*

This statement was countered by two of the craftsmen arguing that the piece rate system, as previously shown, in a formal institutional form dates back at least to the 19th century, and that the piece rate system represents not a hindrance towards innovation and collaboration but if anything is designed specifically for this purpose as a wide variety of different tasks and activities can be framed by it:

> *"Craftsman: In order to implement these thoughts properly, you need to allocate time. If time has to be allocated, likewise money has to be allocated."*

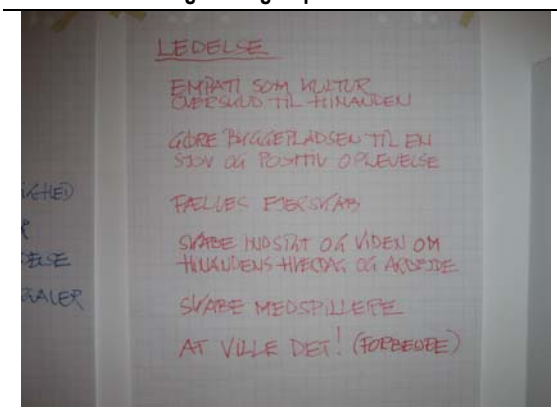
No sooner had this statement been made, a lid was effectively put on the discussion by attempts to dismantle the apparent dichotomy between what we with Green and May (2003: 102) and Green *et al.* (2008: 430-432) could call an enterprise discourse meeting a trade union counter-discourse. One of the external evaluators thus called for the necessity of dissolving the antithesis between salaried employees, hourly

workers and piece rate workers – and that this indeed could be accomplished on this project. Further, one of the facilitators argued that:

> *"Facilitator: Even though we are heading towards a reconciliation culture we cannot eliminate conflicts and opposing interests; however we can practise understanding each other's worldview and learn a new way of communicating."*

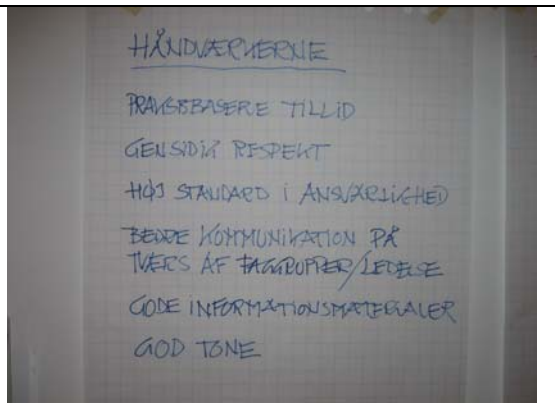
The facilitator then proceeded summarising the project value base as it had been prioritised by the craftsmen[31] respectively the management group earlier that day, and to which we now turn our attention.

Management group's value base



(Empathy as culture, make the site a fun and positive experience, common ownership, create insight and knowledge into each others' workday, create team players, the will to! (improvement))

Craftsmen value base



(Practice based trust, mutual respect, high standard in responsibility, better communication across trades/management, good information material, good tone).

Figure 50. Prioritised value bases.

The interesting thing with these values is perhaps not so much what they say about the actors (though this also is interesting), but more what they say about the workshop as such. Now, I will hazard the claim that not an eyebrow would be raised had the craftsmen and the management's value bases been switched around. We could interpret this observation in numerous ways; however starting with the perspective of what this says about the actors we could highlight the following three suggestions: a) the two groups of actors agree on some more or less universal values, b) they pay lip-service to each other, or c) the discourse on collaboration is highly dominant. From the perspective of what this congruence says about the

[31] As a curiosity it must be mentioned that one of the craftsmen stated that the values reflected the 'normal' everyday working life at the projects he worked on. In response, the facilitator blatantly dismissed the craftsman, arguing that his view would be put at a test on the upcoming project. In a overtly critical perspective, we would say that the facilitator is trying to create or uphold an image of a dysfunctional everyday practice in order to gain legitimacy for his own agenda.

phenomenon of the workshop we could argue that it is a sign of the *heterotopic* (Foucault, 1986) nature of the workshop – a constitutive effect, which at the same time reveals the workshop with a functional quality in relation to the sociality of a building project; yet highly fragile in the face of the same. I will discuss these facets below focusing mainly on the last perspective.

As stated, the similarity of the rhetoric of managers and craftsmen can be interpreted in several different ways. Firstly, we could argue that the two groups agree on some more or less universal values on what constitutes a good project. This could be seen as a testament of the pervasiveness of a new dispositive of negotiation. Nevertheless, I will argue that this level of abstraction on which the values are expressed, it would be surprising to observe any real alternatives, no matter that the participants indeed were in opposition to each other as concerns e.g. the piece rate system. This interpretation is somewhat related to the next suggestion – that the participants are paying lip-service to each other; that they feel obliged to act according to the 'rules-of-the-game' of the workshop and furthermore are incited or urged to do so. Thus, when the participants prior to the assignment are given a presentation in which they are told to define values according to the following four themes, it would be surprising to see them answer a different question – or indeed just answer the question differently:

Table 23. Group assignment – value base (own translation).

Assignment: Each group describes as many values as possible within the four main themes. Prior to agreed time limit, the group has to prioritise six values.	
Collaboration	**Competencies**
– Internally in the work gangs	– Management
– Across groups	– Universal (personally/human)
Responsibility	**Communication**
– Quality in the construction phase	– What you say
– Common rules-of-the-game	– What you do

Finally, we could also argue for the pervasiveness or hegemonic stronghold of a 'collaboration discourse' effectively permeating all levels of the building sector structuring a legitimate discursive site of participation. This suggestion might be appropriate, as we in a Danish building political context seem to have a sort of consensus situation or at least a division of labour between the government, the companies and the unions of the sector, in which a common frame of problematisation has been established on the broader topic of the need to develop

the sector. This common frame has then been followed by a division of work in which trade unions actively use the enterprise policy as a platform for their formulating of a trade policy[32] (see also Larsen and Odgaard, n.y.). Nevertheless, we have here an example of the homologous nature of the partnering discourse, which might also be explained in terms of the context in which the statements were made.

The workshop as an effectively enacted utopia

Using the homologous value base statements as a basis for discussing the phenomenon of the workshop, I will turn to the notion of *heterotopia* (Foucault, 1986) designating a space functioning in non-hegemonic conditions; in other words an actualisation of space that can make a utopia real. Foucault argues that utopias are sites (defined by proximities of relations between elements) with no real place; that have: "…*a general relation of direct or inverted analogy with the real space of Society.*" (Foucault, 1986: 24). In contrast heterotopias are real places, which are: "…*something like counter-sites, a kind of effectively enacted utopia in which the real sites, all the other real sites that can be found within the culture are simultaneously represented, contested, and inverted.*" (Foucault, 1986: 24). Using this perspective reveals the workshop with a functional quality. We can understand the workshop as an actual spatial actualisation of order rather than as a utopian diagram. Furthermore we can understand the workshop not as a way of breaking the diagram of the phase-model but as a way of occupying this space as a heterotopia. Foucault (1986) thus argues that heterotopias have a function in relation to all the space that remains – a function that unfolds between the two extreme poles of a) creating a space of illusion that exposes every real space as still more illusory, or b) creating a space that is *other*, i.e. another real space as perfectly, meticulous and well arranged as the remaining space is messy, ill-constructed and jumbled (Foucault, 1986: 27). In other words, the workshop as a heterotopia is a way of interrupting the continuity and normality of the taken-for-granted order. In specific we observe that we are dealing with the latter type – the creation of a space of perfection of a new social ordering. With the workshops, I thus argue that we observe a situation of simultaneously representation, contestation and inversion of traditional ways of thinking in construction. The workshop participants were thus continuously confronted with different images or facets of the traditional ways of doing work ranging from topics concerning personal conduct to issues of production. Further, we can now see how concepts of trust and change, as

[32] Interview with Head of Secretariat Gunde Odgaard from the BAT-Kartel.

discussed in chapter 7.3, are actualised at the workshop. Hence, as a heterotopia, the function of the workshop is to challenge stable relationships and categories of order and illustrate, at the same time, the possibility of change and the potentials of a new order. In this second stage of the project where onsite work was conducted these possibilities and potentials were linked explicitly to the dual problematisation of the management function and the role of the craftsman.

10.2 Problematising status quo. Qualities of the site meeting

Below, I focus on how the idealised qualities of the workshop are transferred to the project sphere in the guise of the site meetings and how the idea of the *responsible craftsman* is actualised as a necessary response to the smoothing out of space.

The function of site meetings

Not much work has been conducted on the function of the site meeting. As Kreiner (1976) argues the literature contains only few speculations over the possible function that a site meeting may have. Kreiner reports from the formal site meetings that "*have always been called*" and is prescribed by AB 72 (and now also the AB 92)[33]. As Kreiner argues the function of these meetings is not specified in the set of general conditions he instead turns to the explanation of Hansen *et* al. (1970: 27, in: Kreiner (1976: 179)) who argue that:

> *"It is the duty of the site management to ensure that the handling of information between all parties is effective and precise. /This is done by means of the regular calling of site meeting (depending upon the size and the kind of the project) and the immediate sending of minutes."*

Thus, the site meeting is suggested as replacement for the stable communication channels that most organisations possess; a suggestion which Kreiner describes as at odds with his own observations:

> *"De jure, there is no function for the site meeting to fill; de facto, there may be." (Kreiner, 1976: 180).*

What then, is this de facto function Kreiner suggests? On a dimension of functional importance, Kreiner describes the site meetings as uneventful, and not being interested in improving *instrumental rationality* he refrains from proposing suggestions for improvements of the current state of affairs. Instead, he advances an alternative

[33] §11 in the AB 72 and §19 in the AB 92.

scheme of interpretation; to approach the site meeting as a ceremonial event, implying that:

> *"…we should look for the site organizational roles in which the actors try to present themselves, that we should further discover (and understand) the language and other communicative devices which they use in such presentations, and that we finally should look for behavioral constraints which originate in the needs for authentic appearances of the performance." (Kreiner, 1976: 184).*

The reason for applying this focus is attributed to the insufficiency of *our primary framework* to explain the site meeting in terms of its instrumental functionality, and as such an instrumental functionality cannot be found:

> *"…we come to look for a key by means of which '…a given activity, one already meaningful in terms of some primary framework, is transformed into something patterned on this activity but seen by the participants to be something quite else.' (Goffman, 1974: 44)." (Kreiner, 1976: 184).*

For Kreiner, this key is the symbolic contents of the activity and thus not what the act accomplishes but what it says about the actor. Making no immediate connection between the notions of *functionalism* and *instrumental rationality* in a classical economic and sociological sense, I will adopt another approach to the analysis of the array of meetings I have observed. Coming from Foucault, my starting point is the function *per se*, which Brenner (1994: 691) defines as:

> *"…any discourse, practice, or effect of the latter which produces a designated or latent consequence in a given social context. A dispositif emerges when a cluster of functions aims toward the same set of targets, such that a functional system is formed."*

Arguing on the one hand that partnering can be seen as representative of a new dispositive of managing building, whilst on the other hand keeping an eye open for the local sense-making processes, I propose the following dialectic analysis. First I will investigate what is sought accomplished (and how) through the act of socialising on the different meetings (i.e. the functional purpose of the meetings), and secondly I discuss how these attempts of strategising are met by the different agents of the project; in other words, the interplay between constituent effects and local dynamics. Now the differences in the areas of investigation between Kreiner's study and my own study might very well account for the differences in the approaches in more than one way. Disregarding obvious differences in the respective theoretical

and methodological choices – and thus in modes of observing and understanding, another factor might be found in that I deal with a highly politicised phenomenon – an outspoken dislocation or attempt at strategising (however towards a highly ambiguous and dispersed goal). In contrast, the site meeting that Kreiner speaks of can be seen as a so-called 'objective' phenomenon. With this I refer to it as a result of the institutionalisation of a certain rationality and power in such a way that alternatives are forgotten and, even more important, that its function is forgotten.

The Urban Mirror: Between heterotopia and utopia

A central part in the partnering process at the U2 project was the so-called 'Building site school meetings' or 'Urban Mirror meetings' as they were officially baptised at the kick-off workshop. Before discussing the events that took place at these new site meetings, I will tie a few comments to both the name of the meetings as well as to the title of the chapter: 'The Urban Mirror: Between heterotopia and utopia.' In continuation of the formal programme for the first day on the kick-workshop the participants were literally asked to reflect on what name to give the meeting series at the evening baptism. Several suggestions were put forward; however, in the end the process facilitators chose 'The Urban Mirror' as proposed by one of the craftsmen. Now, the reasons for choice of name are something we can only speculate about (apart from the obvious choice of the prefix 'Urban' referring to the specific project) as it was not commented on by the proposer; however it was soon embraced by the facilitators, arguing that:

> *"Process facilitator: The mirror is a good metaphor for what it is you see. Is it the reality or something else you see when you look into the mirror?"*

The participants were further asked to reflect on what they would like too see when looking into the mirror; a rather abstract task, which failed to generate any response from the audience or further commenting by the facilitators. Nevertheless, observed strictly in analytical terms, the metaphor of the mirror seems highly suitable for the purpose of the meeting. Foucault thus states:

> *"I believe that between utopias and these quite other sites, these heterotopias, there might be a sort of mixed, joint experience, which would be the mirror. The mirror is, after all, a utopia, since it is a placeless place. In the mirror, I see myself there where I am not, in an unreal, virtual space that opens up behind the surface; I am over there, there where I am not, a sort of shadow that gives my own visibility to myself, that enables me to see myself there where I am*

> *absent: such is the utopia of the mirror. But it is also a heterotopia in so far as the mirror does exist in reality, where it exerts a sort of counteraction on the position that I occupy […] The mirror functions as a heterotopia in this respect: it makes this place that I occupy at the moment when I look at myself in the glass at once absolutely real, connected with all the space that surrounds it, and absolutely unreal, since in order to be perceived it has to pass through this virtual point which is over there." Foucault (1986: 24)*

Thus, although the mirror is like a utopia, it is also an actual place – a place that dislocates the spatial position of the observer. As such the mirror is a device of questioning and displacement of all the other sites of a culture. In other words, when the participants assemble at the meetings (i.e. when they look into the mirror) they are facing a counteraction, a nullification of the positions they occupy outside the meetings. Their normal practices, their routines, positions, duties, tasks and responsibilities are made subject to a gaze of disruption and intervention.

The suitability of the metaphor can be seen from the official stated objective of the meetings, which are staged as nothing less than a transformation of the traditional site meeting; an event described as "…*the central innovation in the future construction process*" (BygSoL, 2007: 87). A cornerstone in the new site meeting is the staged co-presence of all actors ranging from the designated 'partners' to the craftsmen, and as such the new site meeting includes more legitimate actors than the traditional meeting. Further, the stated purpose of this forum is to develop a so-called learning arena in which the craftsmen have to learn to be able to manage themselves in as many possible ways as possible. In fact this very stated purpose was referred to as an attempt to revitalise apprenticeship and instigate a return of the principle building of customs and practices. I will return to this feature later in this chapter. It was also stated that one of the most important elements in this respect is that everyone on site is acquainted with the project's value base and assumes ownership of the project. Furthermore "…*it is important that everyone embrace the learning culture and do not mistake learning for control.*" (AlmenNet, 2009a: 13).

As for the site meeting, these were held in a hut, in the so-called U2 Base, located on top of the remaining huts housing the site management and the craftsmen. The choice of location might at first be seen as rather trivial, as the sheer amount of people involved in the meetings would make it impossible to meet any other place; however from the perspective of the facilitators, the common meeting room constitutes an important element in the building of communality, as it can be considered 'neutral ground.'

Figure 51. The site meeting room (the yellow container) and its interior.

All participants were seated at group tables, and as far as possible the craftsmen tried to be seated around the same table as the rest of their work gang, with the management, client's representatives and other non-craftsmen either sharing a table or standing at the back of the room if all the seats were taken. This was often the case at the latter meetings where the number of participants had increased from app. 20-30 persons to more than 40.

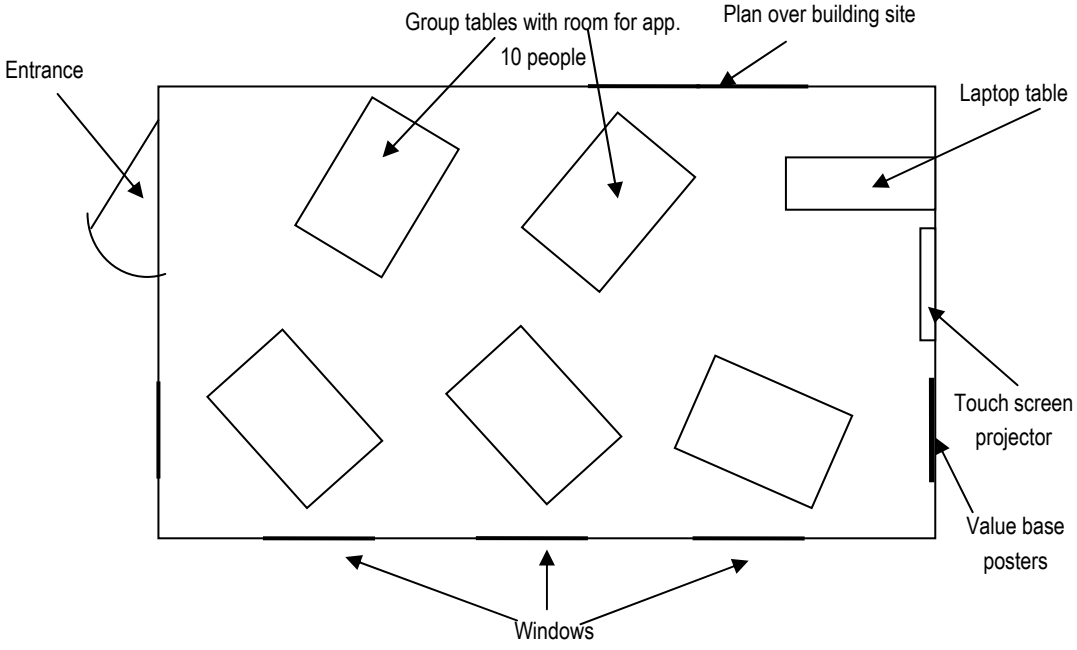


Figure 52. Illustration over the site meeting room.

The meetings were formally run by three 'chairpersons' being two external facilitators and the site manager. The two external facilitators that were also present at the two-day kick-off workshop, were employed at a training centre providing i.a. continuing education in the AMU system, which aims at covering the skilled and unskilled workers need for vocational training and education. Their participation in

the project was financed as a part of the overall development project, partly by the client, partly through refunds from the AMU system. A total of 16 meetings were planned in the course of 10 months of 2008. With the exception of the summer break, the meetings were held bi-weekly. Furthermore, all meetings were to be conducted within one hour. All craftsmen and specialised workers were obliged to participate, whereas the site management team member was expected to. The meetings were called with a fixed agenda consisting of the following items:

Table 24. Agenda for the new site meeting.

Topic	Responsibility
Summary from previous meeting	External facilitators
Site management's review of the project	Site manager
Safety	Site manager/external facilitators
Craftsmen's time	Craftsmen
Selected AMU themes	External facilitators
Topics for next meeting	External facilitators

The homogenity of the meetings, as well as the element of obligation, was partly the result of contractual agreements, partly moral agreements. The craftsmen were thus compensated on their piece rates for their participation in the meetings, whereas the management's moral obligation was affirmed in the project collaboration agreement. In addition to the site management and the craftsmen, also the client organisation was represented at the site meetings; however, not in the form of tenants as otherwise envisioned at the two-day kick-off workshop, but by the technical inspector of the Urban Plan Area. The reason for not inviting the tenants was according to the site manager that the meetings after all would be too internal and production oriented, and that the tenants therefore would not benefit from the meetings. In addition to these actors, the meetings were frequently 'visited' by other actors from the partnership organisation.

From technical rationalism to normative humanism

As argued previously, the site meeting, can traditionally speaking, be considered a striated space; a limiting, structuring device; a technology of power, which determines the conduct of individuals and submits them to certain ends or domination. Christensen (1981: 65-66) e.g. argues that the formal structures of the site organisation is laid down through the agreements the different parties to the project establishes, as it here is determined who yields authority over whom and

how information circulates. The agreements are always followed by a passage stipulating the conduct of site meetings. It is furthermore laid down that the contractor is *obliged* to be represented at the meetings and that the construction client (e.g. through representative) calls and manages the meeting. In line with Kreiner (1976: 179-180) Christensen notes that although the meeting is compulsory, its function is less than clear or at least imprecise, as the only thing we are told by the standard contract document (AB72/92 and ABT93) is that:

> *"At all site meetings statements shall be made on the number of workdays – days lost – on which work has been wholly or partially at a standstill, with indication of the reasons." (Ministry of Housing, 1992: 6).*

Christensen (1981) argues that this paragraph normally is interpreted as an obligation towards documenting the stage of production and reviewing each individual contract in relation to identifying potential problems. We could call this the obligation towards correspondence. Kreiner (1976) on the other hand, does not dismiss this immediate function of the site meeting, but still challenges the above *de jure* function of the meeting, arguing that:

> *"…the presence of the participants should not be understood in terms of free (but busy) men's rational allocation of their time. Probably, they did not participate in order to influence the progress of history, but in order to comply with the duties of their job." (Kreiner, 1976: 178).*

Instead he suggests that the site meeting can be seen as a forum for the informal site organisation; a space in which the different parties in the presence of witnesses confirm their knowledge of the rules of the game and their willingness to comply to these (Christensen, 1981: 66). These rules of the game, which Kreiner (1976: 186, 248) describes in term of statuses, being a) the superior – enacted by the site manager; b) the subordinate – enacted by the site agents; and c) the witness – enacted by the site agents when not promoted actors, depict the site management as an omnipotent, omnipresent management. This is argued to be in stark contrast to the management's actual authority and possibilities, but is in my eyes nevertheless pivotal in upholding a given social order. It is pivotal in ensuring control and circumscribing each otherwise self-interested actor into an unequivocal and fixed position that can be effectively managed without compromising either the integrity of the organisation as a whole or the normative ideal of the rationalisation dispositive. As such the 'traditional site meeting' can be seen as a striated/stratified space (Deleuze and Guattari, 2004), i.e. something fixed:

> *"…organised, ordered; such space bounds, structures, frames, and locates action; and practices of discipline, regulation, subjection take place inside these spaces" (Osborne and Rose, 2004: 218).*

This regulation and subjection occurs on many levels; there is the immediately observable, being the relationship between the superior and the subordinate. More importantly, there is also the very fundamental subjection to the conformity of the *norm* of rationalisation, e.g. the notions of unequivocalness and control. This is seen in the way that also the site manager is 'assigned' the role of the omnipotent, omnipresent superior – a role he cannot escape as it is a crucial element of the normative ideal of the rationalisation dispositive. The ceremonial status of the traditional site meeting thus emerges as an essential and necessary social technology in the realisation of *correspondence* between the formal/ecological conceptions of the construction site (see Kreiner, 1976) and the turmoil encountered in the face of the diversity and contingencies, which cannot be effectively silenced. Social order is in other words non-negotiable.

Using the U2 project, it is however possible to see the site meeting *vis-à-vis* a different pattern of order – as an event in which the different actors are not directed towards the ideal norm of rationalisation, but instead have to find their own place: *"…in the course of evolution and to search out the best means by which to act upon the future."* (Osborne and Rose, 2004: 220). This is accomplished by instigating a shift from a so-called classical decision management style to value-based management style, which in the words of the facilitators implies a change in focus along the following dimensions:

- From rules to frames.
- From structure to culture.
- From hierarchy to equality.
- From stability to innovation.
- From conflict to reconciliation.

This is conceptualised as a shift to a *normative humanistic* perspective, which is in stark contrast to the traditional *technical-rationalistic* perspective that considers issues of managers and structures rather than of culture and employees. We can in other words see these efforts as an attempt to create a space for intervention; to dislocate the existing sociality and question the otherwise taken-for-granted or *sedimented*

social order. Thus, when I state that the new site meeting is not about *normation* but *normalisation*, it is based on the argument that the different participants are not directed towards a prescriptive norm (neither that of technical rationalism nor normative humanism). Rather, what takes place is a supplementation; a mixing of competing rationalities that begs the participants to deduce a norm from the interplay of differential normalities. The stated purpose of these scholastic exercises is linked to the concept of the self-governing or autonomous building site. A concept that consists of a two-stringed development[34]:

1. That the gangs are able to manage themselves in so many areas as possible, including the management of work, collaboration with other, purchasing, logistics and on-site welfare.
2. That the interdisciplinary competencies have to be strengthened, and that the gangs' development of competencies within management and communications has to be a part of the project.

This development however puts stress on several existing conditions in the sector; most important of which is the way that management is understood. As argued by the managing director of the contracting company at one of the site meetings, it is necessary to part with the understanding that it is possible for the individual person to manage all aspects of the project. In contrast the manager has to realise that he is part of a team, and that this team's prime task is to serve the employees. Finally, and perhaps most interesting is the notion of the engineer as barrier towards the realisation of these intentions, the reason for this being that "…*they through the previous 50 years have been schooled in thinking in parts rather than in wholeness.*[35]" This new understanding of management has to be developed in parallel with a corporate culture that supports the intentions and makes room for innovation. In this respect the craftsman is seen as a vital resource. Whereas craftsmen in the wake of the rationalisation efforts were constituted as 'bits and pieces' i.e. were made subject to the same technical-rationalist means and ends as the materiel and materials of the project, they are now constituted as subjects in the building process. Thus, central in the efforts on the U2 project is the idea of control from the bottom-up; i.e. that:

– The workplace (both corporate speaking as well as on the specific projects) has to be democratised.

[34] As formulated on the two day kick-off workshop.
[35] Quote from company director, November 28, 2008.

– Employees on all levels are encouraged to formal and informal participation whenever the opportunity arises.
– Work structures that encourage the full commitment are developed.

These ideas have to be realised by focusing on developing a *craftsman culture* based on concepts of team spirit, relationships building and delegation. This is a development that, in summary, problematises the role of the craftsmen as well as of the management and attempts to *smooth out* the traditional space; a smoothing out that is accomplished by re-introducing an old principle: apprenticeship.

Apprenticeship and the return of building customs and practices

The meetings are thus performed on a principle of apprenticeship by which, in this respect, is meant that competencies have to be concurrently developed throughout the process through mutual knowledge sharing at craftsman level (EfS, 2000a). Observed as a specific social technology, does apprenticeship in this respect not entail exactly the same as the logic of partnering: the acceptance of the situational and the grasping of opportunities that arise inherently from the participation in joint activities? Let me clarify this by revisiting the discussion of building customs and practices from the second part of this book.

In the examination of what could be called the pre-modern building sector I argued that the mixture of written rules and unwritten customs of conduct constituted the diagrammatical notion of 'building customs and practices' and that skills and apprenticeship played prominent roles herein. The very sociality of the sector was predicated on the principle of skills, which was seen most profoundly in relation to questions of management, organisation and conduct of work. It could thus be expected that the craftsmen through their formal training as apprentices was able to, and indeed did, make necessary variants in relation to acquired standard methods in the course of their daily work and furthermore was able to coordinate their tasks with other craftsmen, both within and across trades. Consequently, coordination and control was considered a part of the 'practical rationality' of the work of the craftsman. As the different work gangs began their work on-site they would meet and discuss between them how best to coordinate their activities. They could do this because they had an acquired as well as practical insight into both *what* and *how* to build. The lodge; the institution of the site meeting was instrumental in this social exchange. This situation differs quite radically from how 'building

customs and practices' was seen in the chapter on the actualisations of rationalisation. Here I described how the efforts to superimpose a new building custom, moulded over the repetition of details, resulted in control and coordination being placed in the hands of the management function – depriving the craftsman the last of his skills. We could argue that the development in the wake of the sectoral rationalisation efforts effectively eradicated the elements of technical traditions, long-term experiences and joint development of customs of conduct – a development that the new site meetings can be seen as an attempt to reverse. Accordingly, the meetings can be seen as instrumental in breaking-down; in de-institutionalising existing relations, conceptions and not least manifestations of power and replace this complex with a new management rationality that treats the craftsmen as subjects rather than as objects of control. As the site manager tells:

> *"Site manager: I don't plan. In reality, I am a guardian and a motivator. I don't plan the individuals' work. My task is to motivate them to keep the arrangements we have made […] for me it is important that those who stand with a problem know what to do about it. I could tell them what to do everything morning when I meet in at work at 08:30; however this is no good if the craftsmen start at 07:00. If you don't give them co-responsibility for and ownership to the plan […] something is wrong. If they can persuade you to make changes, we have come a long way. It would be an admission of failure for the project and my management style, if I had to plan the individuals' work […] a joint ownership requires discussions in a common forum."*

Dialogue and discussion are here seen as dynamic tools in the process of activating the individuals. As such the meetings can be seen as space that makes possible the constitution of the craftsmen as acting subjects with a responsibility for the conduct of not only their own work, but also the overall activities of the project. In this light, we could reverse the argument of Kreiner (1976: 109) who, in commenting on the technological development of the building sector, states that:

> *"Concurrently with the increased amount of a priori planning and specifications, the demands for a variety of skills – manual as well as intellectual, which formerly made up the jurisdiction of a craft – shrinks. The development furthers specialization, but not craftsmanship"*

Rather, we could speculate that when partnering dissociates practice from a priori planning, the above variety of skills grows; a development which furthers craftsmanship at the expense of specialisation – or to make a reference to an

aforementioned discussion at the kick-off workshop, the advancement of inter-disciplinarity at the expense of specialisation[36]. As a smoothing out of space, partnering and the site meeting is effectively about shifting power and altering the way that people can engage and relate to each other within a space of action.

10.3 Order and disorder

In the previous chapter on the qualities of the site meeting, I discussed a series of elements that were seen as means to actualise the idealised smooth space in the sphere of the site meeting. In this chapter, I will reverse the gaze and examine what is actualised by this smoothing out of space with emphasis on what social order is produced when faced with competing rationalities.

The order of the new site meeting

Where the traditional site meeting is a place for the display of central authority and decision-making, the new site meeting seeks to expose both of these as de facto unwanted in the face of the ideal of partnering. Thus, when existing relations, conceptions and manifestations of power are sought displaced and de-institutionalised social order becomes a crucial issue. Below I will, in reporting from one of the new site meetings at the project, discuss how the issue of order is handled.

> *February 22nd 2008. The first of the new site meetings at the project was scheduled to start at 07:00 at the building site. I was invited to the meeting by HD and NB, two of the project's external evaluators and partakers in the various development initiatives at the U2 project – initiatives concerning the 'exhaustive measurement of the value concept and the test of an evaluation concept focusing on building parts.'*
>
> *HD wasn't present at the meeting, however NB was, which turned out to be a good thing, as I had to call him up to find the right site hut on the huge area constituting the building site. At precisely 06:45, I walked up the stairs and entered the site hut, where NB and three other persons (which turned out to be the external process facilitators and a director from the contracting company) were present and setting up the scene, preparing PowerPoint presentations, coffee, bread – and not least a lot of pastry.*

[36] Specialisation is here used in a rather dogmatic labour-sociological tense where it is linked to a notion of degradation of skills.

Within the next five or ten minutes 20-25 additional people turned up, mostly craftsmen but also the site manager. The first comment from one of the craftsmen soon aired, relating to the title of the meeting, the building site school: "Hopefully we won't get any home assignments." As these things do, the comment was soon followed by another comment: "Well, I didn't do my maths." The participants joked a bit about this until the director opened the session by welcoming the participants and presenting the programme. After a short presentation, we came to the first key presentation of the programme, the introduction of the facilitators, the external evaluators and the purpose of the meetings – the revitalisation of the traditional site meetings.

Then NB took the floor, speaking about the proposed product evaluation and its focus on measuring of time consumption for various building parts on selected segments of the refurbishment project. NB started with a presentation of himself, and then introduced me as "being in training to become a researcher" – something which also the craftsmen have to become! NB argued that the purpose of the meetings is to teach the craftsmen to become mini-researchers; to teach them to educate themselves and make money in the process.

Quite some efforts were made to stress that the workers themselves are the main source to knowledge, as they and not us (designating the assembled researchers, facilitators, managers, etc.) posses the knowledge we need to tap into. NB then presented a 'repetition effect chart' and discussed the ultimate outcome of all these exercises on site – to learn how to be more productive at fabricating the next unit compared to the previous units.

The craftsmen were asked to comment on the cost reduction for the n^{th} unit in relation to the first; to comment on how much they believe could be saved through increased efficiency. A lot of more or less serious suggestions were made – 37 pct. was mentioned with a laugh, as this number had been mentioned by the company's own lean construction expert at a previous meeting.

After this roundtable-talk, NB stressed the point that it was the craftsmen who had to do the evaluations themselves – not some external researcher or consultant. Not surprisingly, a small discussion then arose. One of the craftsmen remarked that it could pose a problem to evaluate on time consumption, as they traditionally didn't record these types of information. Another stated that it indeed would be difficult, as: "we use our time on building things – not writing!"

Several others also stated their reservations towards these evaluations – and how they should be used, as there are many variations in operations for the same building parts depending on

where they are located. To this, it was replied that these issues would be accounted for in the evaluation at a later stage, and NB further commented that it was up to the craftsmen to decide whether or not to conduct the evaluation, and that the payment for this work would be sorted out along the way.

If the previous discussion had been minor; then it exploded now:

> *Craftsman: "This requires many hours of office work. Is the company willing to pay for this?"*
>
> *NB: "We will discuss this at a later point. For the moment, I am only interested in hearing whether or not you are interested in this project."*
>
> *Site manager: "We back this project. We have talked to the company, and…well, the client has put this project at disposal for the government and others to follow, and it is important for the company as a competitive parameter, when we have to bid for other projects, so…"*

After a while of heated discussion, one of the facilitators, AD, interrupted prompting for a solution to the issue of determining whether or not the craftsmen would participate. Eventually, the director decided to put off the decision to a later date. This, however, didn't stop the discussion until the facilitators intervened, as it was time to move on to the next item on the agenda – the presentation of the primary topics for the meetings: a) work environment, b) the building process, c) collaboration, d) learning, and e) speaker's corner.

AD started with a little anecdote from when he was strolling around his neighbourhood one day and saw a huge banner hanging from a building saying: "Did you remember to take responsibility today?" He then stated that this message is a very good picture for this very project, as conflicts costs a lot of money for the society, the client, the companies etc… He stressed the point that conflicts can't be eliminated, but what we can do is to get better at collaborating thus reducing conflicts: "Change has to make sense for the individual and the community" was his message.

AD then proceeded to an example of how these school meetings be setup and run, however he was soon interrupted by a site agent, not participating in the meeting, with the message that a red van was parked blocking for a crane. One of the craftsmen quickly stood up, and played along the message of responsibility, proclaiming that although it wasn't his truck, he would personally take responsibility today and find the person who had parked in such a stupid place. This obviously made everyone laugh.

As the meeting commenced again, AD summarised the purpose of the upcoming activities: to learn to become more knowledgeable on the way we build. The time schedule for the meetings was then outlined; to which one of the craftsmen replied that if the meetings are to be conducted with the purpose of learning, why then have the bulk of the meetings at the end of the project, and not at the beginning. In response AD argued that due to administrative reasons, the current schedule is the only possible structuring. Another craftsman then suggested that it wasn't that important anyway, as the meetings shouldn't be replacing the daily dialogue. AD responded that although this was true, the meetings had a further important function as they will replace the safety meetings – an arrangement sanctioned by the Danish Working Environment Authority.

At this point, the site manager cut into the discussion stating his undivided enthusiasm for the meetings, linking these meetings to a reorganisation in, and change of, the traditional ways of conducting site meetings: "It'll be very interesting. We are given an opportunity to talk about something different than usually, where everything just is kept on a tight rein." The site manager then concluded the meeting by delivering a heartfelt praise on behalf of the construction client in relation to the user involvement, stating that the residents are very, very satisfied with the process, and that several tenants spontaneously had reported back to client with their praise.

After the official meeting had ended, the facilitators, the site management and the directors had a small talk on the future meeting and the importance of using these meetings, where everyone participates, to facilitate common information sharing and keep everyone updated:

> *Site manager: "It is important that everyone contributes to communicate all relevant information – it happens too seldom."*
>
> *Facilitator: "Yes, it is important to create the idea that this is a new building process."*
>
> *Site manager: "These meetings should be used to include everyone's competences – it's a unique opportunity. By the way, I have to order more tables and chairs so we have room enough for everybody."*
>
> *NB: "Yes, but we shouldn't give them assignments; however it is still important to give them responsibility for something."*
>
> *Site manager: "Yes, to give them ownership…"*

> *Facilitator: "[interrupting the site manager]…yes, our objective is to become redundant…we should make them responsible for the meetings."*
>
> *Director: "Yes, they have to feel it is their meetings!"*

What we are faced with above is a typical example of the tentative nature of the new site meeting. From the perspective of the managers and facilitators there is a general acceptance of the importance of the meetings and the elements of responsibilisation and ownership; however only a very frail conceptualisation of how to realise the intentions and what actually to socialise about in the process. At most of the meetings (especially at the first half of the meeting series) all the right things were said and done. This fact might account for the uneventfulness of the meetings in the light of what was actually sought accomplished – to instigate a new order. When I say that all the right things were said and done, it should be seen in relation to the way that partnering seems to enter not the political/regulatory sphere but also the social/project sphere as a logic of exemption to the idea of a traditional order. At the meetings this logic translated into a principle for inclusion and exclusion. At first, the meetings seemed to be a space where everything could be taken in order to be discussed and smoothed out. Project changes, time schedules and production methods are all topics that were included at the meetings only to be revealed as illusory, as every time the meetings drew near to assuming a function in relation to the project as such the discussions were halted. What were allowed to be discussed were two things in particular. Either the short-term and personal or the long-term and meeting related. On the latter, a popular topic was thus the discussion of future topics for the meeting series as well as the challenges faced in meeting the intentions stipulated in the project value base. As for the discussions concerning time scheduling and production methods it was apparently allowed to discuss:

- How things had improved since the previous meetings.
- The value of better communication.
- What would be good ideas to do in the future.
- The benefits of improved flow.
- How the meetings could be improved.

As for the short-term and personal, the participants were often asked to reflect on how to conduct themselves in their working life in relation to the agreed upon value base. Especially, questions of how to increase ownership to the project were

discussed and linked to issues of production and planning. Much of this discussion revolved around the notion of order, or rather the lack of order. The quest for order (here used in its widest sense) was translated into a search for signs of disorder; of mess on site. Following the logic that a messy site is a symptom of the lack of respect towards the community and a display of individual avoidance of responsibility, much of the discussions revolved around this topic.

Responsibility and the May 9 resolution

A recurrent theme on the site meetings was neither the attempt to explore, nor ensure correspondence between plan and reality; rather it was the exhibition of photos from the site. This was an element that according to the facilitators and the site management stressed the issue of responsibility. Below we enter a site meeting, during the site manager's review of the project:

"Site manager: Everyone who has ever been a child or has children themselves knows about these memory games where you have to remember what is on the other side of the cards. My children are good at this. I have transferred this to our site. Are we the memory game of building sites? Who can remember what is hidden beneath the tarpaulins? As I walked around the site the other day, the number of tarpaulins amazed me. We have materials lying around the most absurd places, and you wonder where they are actually used […] do yourself a favour the next time you walk around the site – look around. There are times when you think 'oh, my…' I mean right down here, I would like to know what is beneath all these piles…

Craftsman A [interrupting the site manager]: …why don't you lift the tarpaulin and have a look then?

Site manager [ignoring the interruption]: I have had that mountain lying outside my window for more than a month. I don't know what it is. I haven't bothered myself to have a look. I hope someone knows what it is […] we have materials scattered all over. We have windows and isolation over at Kjeld's place and you can ask yourself why on earth they have ended up over there. There are probably a lot of good explanations; however the materials are not used over there […] now we also have H-profiles lined up along the road and iron stored outside the fences […] and you might ask: 'what is the problem?' Well why not place the materials where they are used?

Craftsman B: "Well, why not have another tent, we could store materials in? One of the reasons the materials are covered by tarpaulins is to protect them from the weather."

[…]

Site manager: Yes, I know that might help. I'm just trying to open your eyes for the fact that materials are located everywhere now.

Craftsman C: There is a very practical reason to the placing of materials. Take the balcony iron out there. It is placed in a big pile […] and that's really crappy because we have to make all the lifting by hand. Why don't we make a shelving unit, accommodated for the truck, so we can get an overview and only take the iron we need?

[…]

Site manager: That's a good idea, and it'll probably be the case in the future. However, I just wanted to stress the point that even though there might be plausible reasons for all of this, excuses have a tendency to grow […] a final thing we noticed on our walk around the site was the Carl-F container – and you could ask why on earth we have chosen to focus on this. If you don't know, the Carl-F container is the yellow one down there. Our safety organisation has previously criticised this container and demands that we keep better control with this one, and I believe this criticism is just. The problem is that the Carl-F container is everybody's responsibility, and hereby it soon becomes someone's responsibility – and who is this someone? I would like to take this opportunity to say: 'It is you!' Someone and everybody are you! On the previous safety meeting we discussed that the alternative to you not keeping order in the container is that you will only have access to material between 7 am and 7.30 am. No one is interested in this, and I don't want to post one of my supervisors as guard down there, but this is important! Take for instance the ladder in there. I don't know or care what it is used for, but every time I am down there it's in a new place. Why doesn't it have a fixed place?

Craftsman D: We have a problem with some of the material, which has been moved from the Carl-F container to the tent. Why can't we have one location for our materials so we know exactly what we have and where it is?

Site manager: Well, we could do that, but 'we' are you.

Craftsman D: But that requires that someone invests the time, and make sure it will run, but who can do that?

Site manager: That might be the case, but as Poul [pointing to a craftsman] said at the safety meeting the other day, it is frustrating to see a colleague rummage through the materials you have ordered only to throw it around, when they are finished […] do yourself and your colleagues the favour and place the materials where they belong […] it is that easy.

[…]

Craftsman E: Come on…, you would need to know where to place everything, and I can't figure out the system down there.

Craftsman C: We are five work gangs at the site. There are extremely many possibilities for making different systems if we all keep order down there according to our own systems and our own conceptions of what is right and expedient. That'll result in just as much mess as now […] you can put it like this: 'if we are to establish order based on that container and how it appears now and how we each would like things to be, we won't see any order at all.'

Site manager: Then I would suggest that you appoint someone to keep order in that container.

Craftsman F: But, who will…

Site manager: [interrupting] …don't make this a question of payment. It is your materials. You order them. We have provided this container for you, so don't make it a question of central power – that some else should sort it out for you […] it is your responsibility that the container is in order.

[…]

Site manager: Anyway, this is something you have to work out for yourselves. Don't look at the management or me […] this is a topic that clearly signalises whether we take responsibility for our work or just consider our own personal gains.

[…]

Craftsman C: This discussion is to some extent a waste of time, if we don't reach any other conclusion than: 'well, you have to do something about it then.' That is avoidance of responsibility if anything is. If we don't reach a decision that someone here, who and when, will deal with this issue and establish a… 'May 9 resolution' for this container, this dialogue is a waste of time.

Site manager: Well, I think you should consider doing this then.

Craftsman C: This is typical, every time someone suggests something; responsibilities are immediately placed on them. Of course, you could do this as a principle if you want to strangle the conversation."

The *May 9 resolution* was eventually designated as a defining issue at the meetings; a recurrent theme that resurfaced from time to time as a showcase for the display of the participants' ability to 'walk the talk' of ownerships and responsibility. From time

to time the notion of this resolution aired when the discussions on the meetings became circular and no decisions could be made as to who should taken action in relation to a given problem.

Unfit topics or bracketing off the traditional?

Kreiner (1976) introduces the notion of 'unfit topics' at site meetings, designating those events, which threatens the ceremonial staging of the site manager's authority. At the UM meetings we also face a series of what could at first be seen as 'unfit topics' but in the context of the analytical frame adopted rather should be conceived as a much more fundamental 'bracketing off' of the traditional. Accordingly, one of the most notable features of the site meetings was the way in which several otherwise quite fundamental issues were effectively set aside in many of the discussions. In particular, this was the case with issues of planning and piece rates. I think a good example of this is provided at a meeting, where disorder once again was the theme, and the discussion turned towards providing possible solutions. The story below sets off in a discussion of how the site can become tidier, and work processes more efficient, if the materials can be sorted in 'production batches' where each batch contains just the right amount of materials needed to complete one full cycle of work operations for one gang. We enter the meeting as the discussion addressed whether or not an extra tradesman's assistant would solve some of the problems.

> *"Site manager: This is about to develop into a piece rate discussion; however I think it is important…I think it is very rational to make a plan – I could easily make one, but I am certain that someone won't applaud if I do it […] If you believe that we need such a plan, then make it; write it down on a piece of paper. But instead of arguing that 'someone' has to do, write down who you expect to do it and give the plan to me […] it is you who know what materials to move and when to move them […] but don't just say that 'someone' has to do it.*
>
> *[…]*
>
> *Craftsman: I believe we had this discussion a month ago, and I would like to say that I think, in relation to this format of conducting the meetings, we have been very imprecise in placing responsibilities for actual work.*
>
> *Site manager: I complete agree. We are imprecise when we use the word 'someone'.*
>
> *Craftsman: It's not about that. We discussed that [one of the assistant site managers] had to make a plan for the unskilled workers that made it clear what to move and in what order.*

Site manager: Yeah, but what do you want to move? What do you want move?

Craftsman: When we move on to a new section, we have some materials that we want to take along with us. They should not just be moved to the new section, they have to be moved in the right sequence. And not to mention all the new materials we need. And it is this plan I am calling for.

[…]

Assistant site manager: There are two things we are confusing here: something with a plan in order to have the materials at hand in the right order every time we start a new section. And then it's something about moving along old materials with us. Our tradesman's assistants' only task is to transport new materials […] it is not their job to move leftover materials from section to section […] if you have the expectation that 'someone' takes care of this for you, then…

Facilitator: What does it take to move on from here?

[10 seconds of complete silence]

Assistant site manager: Well, then let me ask: does it work out ok with the tradesman's assistants who have been here for a long time?

[General and scattered positive expressions]

Assistant site manager: Well, that was my impression as well […] the problem in my eyes is that you place unrealistic expectations on them – that you expect them to clean up after you…

Craftsman: But they should be able to…

Assistant site manager 2 [interrupting]: I think we should close the dialogue now. I have this dialogue with [the site manager] and [two of the craftsmen] and about how the piece rates are arranged.

[…]

Site manager [interrupting the discussion]: I agree, and I would like to say that the discussion about planning doesn't belong here but at the weekly planning meeting. But speaking about planning, surely someone has to be able to present an overview […] this is your responsibility."

The above storyline contains more important issues. As can be seen issues of planning were effectively excluded from the site meeting and instead transferred to

the weekly planning meetings, and issues of piece rates and payment were altogether removed from the sphere of the project. There is an apparent reluctance towards specificity at the meetings at the expense of generality – a dichotomic relationship that is inversed at the weekly planning meetings as we shall see below. Where Kreiner (1976: 208) argues that the conditions for declaring a topic unfit for the discussion at the site meetings was that it in accordance to the ceremonial staging of the meetings "…*threatened the site manager's representing and epitomizing of himself in the role of authority*" I contend that the bracketing of topics rather should be seen as the specific *actualisation* of the space created by partnering. Thus, the bracketing is a function of the interplay between dispositives rather than of human action. As we have seen, this actualisation constructs questions and immediate confusion in the otherwise ideally structured sociality of building. This is the case whether it is mirrored in the managerial ideal type of *rationalisation* or the romantic conception of *building customs and practices*.

In continuation of the above quoted site meeting, I decided to attend a series of the weekly planning meetings as well. What I hoped to accomplish by participating also at these events was to qualify my observations of the site meetings and be able to ask what is interesting, different or particular about the site meeting. I therefore approached the assistant site manager who was in charge of the weekly planning meetings and asked for permission to participate. The permission was immediately granted, however followed by wonderment at my interest in these meetings, as they were just 'yes-and-no-meetings' as it was prosaically phrased. The weekly planning meetings were a part of the lean construction efforts at the project. These efforts were initiated as a result of the contracting company's own internal business strategies. I will not venture into a discussion of lean construction in general (others have done this e.g. Simonsen, 2007) but instead focus on how lean is actualised. With Kreiner's (1976) discussion of the site meeting as a ceremonial event in mind, I think I can say that the similarities between the two types of meetings are striking:

> *"The site meetings were called weekly, had a stable number of participants, and a fixed agenda. Such a regularity was the result of contractual obligations. The site manager was obliged to call the meetings and the site agents were obliged to attend. The items on the agenda represented problem areas rather than specific discussion topics. Each contract had its own item on the agenda, a fact which made the majority of items relevant to only one of the site agents." (Kreiner, 1976: 178).*

However, where Kreiner reports that:

> *"For each contract, the site manager commented on the progress of the work, compared it with the plans and the decisions from the preceding meeting, and issued orders in case of discrepancies. Most of the talking was done by the site manager in spite of the fact that in many cases the site agents must have been better informed on the subject." (Kreiner, 1976: 178).*

it is now the craftsmen who do the commenting and comparison under the auspices of the watchful eyes of the site manager. In case of discrepancies the site agents are questioned by the manager as to the reasons behind, whereupon orders are issued.

> *"The heat of the debate was low […] Much of the information being exchanged during the meetings was known in advance to the involved parties and of only marginal relevance to the majority of the participants." (Kreiner, 1976: 178).*

Compared to the UM meetings it is evident that we are in a space where order is restored. Lateral communication is allowed to take place, but does not do so. The craftsmen have no need for communicating formally on these meetings, as there hardly are any interdependencies between works on a gang level. As a result, gaffers only showed up when it was time for their delivery of information.

Figure 53. Work cycles, flow and stages of completion.

Consider as an example the above picture from the site as well as the below illustration.

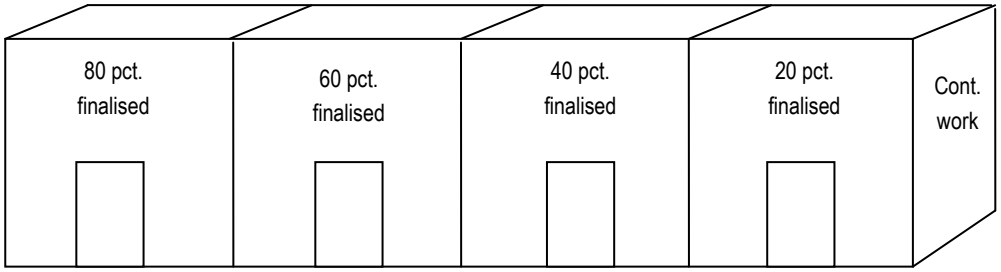


Figure 54. Work cycles, flow and stages of completion – schematised.

A total of six gangs work on the facades, each of which is responsible for certain tasks and operations that the other gangs do not perform. The end walls are manned with a single gang accomplishing all operations. The gangs are manned in such a way that their work cycles correspond to each other, and they do not come in contact with each other. Thus, communication is rather vertical meaning that the management poses questions on the progress and the gaffers (or other craftsmen) provide the answers. Key personnel in this respect are the workmen's assistants and the scaffolding crew who service the craftsmen. At a typical meeting, the craftsmen would give account of the current stage of construction and the following weeks planned work, highlighting any sparse resources they might require. The management then decides who are allocated the resources, and who should do what and when. The management's display of authority is evident. In case of differences and disagreements, the management decides upon a solution – quite a few times ruling against the arguments of the craftsmen. Furthermore, it is evident that the weekly planning meeting is not a place for discussions; it is rather a place for the swift conduct of planning in requirement to the order of the production concept. In this respect the weekly planning meeting emerges as the opposite of the Urban Mirror meetings; or rephrasing it according to the order of the traditional to which the weekly planning meetings belong, the Urban Mirror meeting emerges as the opposite of the well-established disciplinary order of building practice. And even though Foucault argues that the 'division of labour' between dispositives of *discipline* and *security* is that the former is centripetal, whereas the latter is centrifugal and able to incorporate new elements otherwise bracketed off by the discipline's regulatory intervention, we see on this project that the incorporation of elements is conditioned by the bracketing of the disciplinary traditional. In other words, the

linking together of some components as functional elements in partnering is conditioned by the bracketing of the traditional disciplinary complex.

Summarising the order of the site meeting

I think that one of the reasons why the participants at the site meetings expressed confusion as to the purpose of the meetings is due to the rather peculiar double role of the meeting. We can argue that it at one and the same time appears as a sanctuary and an enclosure, and that there is a dichotomy between the inner; the free dialogue of the first and the subjugating exercise of authority in the latter. In essence this is however what governmentality implies. Thus, as Foucault (1988) argues, governmentality can be understood as the contact between technologies of power (which determine the conduct of individuals and submit them to certain ends or domination) and technologies of the self[37] (which permit individuals to effect by their own means or with the help of others a certain number of operations on their own bodies and souls, thoughts, conduct and way of being). Hence, despite of the seemingly normative humanistic purpose of the meetings and the way this ideal is sought by dialoguing, communality and consensualisation, one should not make the mistake of confusing the meetings with either utopias or powerless spaces. Even though we could argue that the new site meeting has heterotopic qualities, it does not represent a *habermasian* ideal speech situation where the participants are liberated from internal as well external coercion. A heterotopia represents, contests, and inverts all other real sites that can be found within a culture. Even though it thus might be tempting to see it as an 'emancipatory device' in the face of the traditional circumstances of the site organisation, a more suitable representation of the meeting would be that it is space for the displacement of power strategies and a device for another type of exercise of power. An exercise of power that exceeds the predominant understanding hereof in the building sector.

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[37] In *'Technologies of the Self'* Foucault (1988) argues that his objective for 25 years has been to sketch out a history of different ways in our culture that humans develop knowledge about themselves, whether it is through economics, biology, psychiatry, medicine, or penology. The main point, he emphasises, is however: "*...not to accept this knowledge at face value but to analyze these so-called sciences as very specific 'truth games' related to specific techniques that human beings use to understand themselves*" (Foucault, 1988: 17). Of these techniques or technologies, Foucault (1988: 18) claims there are four major types, each a matrix of general reason:

- *Technologies of production*, which permit us to produce, transform, or manipulate things.
- *Technologies of sign systems*, which permit us to use signs, meanings, symbols, or signification.
- *Technologies of power*, which determine the conduct of individuals and submit them to certain ends or domination, in other words an objectivising of the subject.
- *Technologies of the self*, which permit individuals to effect by their own means or with the help of others a certain number of operations on their own bodies and souls, thoughts, conduct, and way of being, representing a subjectivation of the subject.

Remember the facilitator's message at the first of the meetings; that change has to make sense for the individual and the community. I think it is fair to mirror the above case in this statement and ask whether or not the meetings seem to have made sense to the involved participants. I think that what we are facing in the above storylines could be described as different *actualisations* of smooth space; i.e. in the *making* of a new principle of sociality. On the other hand, we are also (and please pardon me for the following normative view) facing some of the problems and limitations in the attempt to smooth out space. Surely, seen as mediators, intercessors or technologists of smooth space the facilitators and site manager are trying to provide the means by which others "…*might do it themselves*" (Osborne and Rose: 2004: 221). However as shown above (and as will be discussed further in the next chapter), the constant bracketing of the traditional and the safeguarded, without inserting another point of *recognisable* reference, only lead to confusion. The meeting places a lot of, should we say, ideological expectations or constraints on the craftsmen: that they have to be responsible, innovative, self-governing, handle logistics and purchasing, adhere to the needs of the tenants to name but a few. From the craftsmen's perspective, however; it is not at all clear how this should be accomplished.

The site manager goes to great lengths in taking a contrary position to what is normally seen as his jurisdiction. Where the site manager's traditional duties and rights would consist of inspecting, controlling and correcting the element of the plan, we now have a site manager who, in identifying and accepting the position being offered to him, sees himself as a guardian and motivator and tries to extend this responsibility for realising the intentions, which he has taken on his own shoulders, to the craftsmen. As the site manager phrases his own role:

> *"Site manager: I am the client's man, not E&P's man. Of course I have loyalty towards E&P but rather than generating as much profit as possible for E&P, I have to spend the money here as best as possible. This is a major difference. When I optimise, it's for the benefit of the client – this is a huge mental barrier for many […] it's not just something I preach – it's something I practise. I would be the wrong man, if I didn't feel this way. This is why I am irreplaceable on this project. […] I have a lot of discussions internally with the company. I have criticised their attitudes to pieces – it is reprehensible that you can say one thing as manager at a meeting and then do the opposite afterwards."*

The manager expects nothing less from the craftsmen. But where the manager clearly sees his tasks as a piece of identity work, the craftsmen seem more reluctant. I think the attempts to subjectivate the craftsmen; to offer a new position for them to occupy, rather turned into a process of subjugation. The reason for this is that the meetings failed to actualise an element of *recognisability* (Bojesen, 2008) in order for the craftsmen to identify to 'the call of partnering.' As for the facilitators their intervention took the form of a coaching process in which they sought to guide the discussion by posing questions that beg the craftsmen to work out answers and solutions on their own. This is a process of making the craftsmen 'give themselves to themselves.' But, in order to give oneself to oneself (Andersen, 2003: 24) one has to know oneself – a process which can be accomplished by looking into a mirror; however what if all one (is allowed to) see in the mirror is oneself in a placeless place; there where one is absent? Here the calls for flexibility, innovation, responsibilisation, etc. will become mere utopian ideals – abstracted and removed from the surrounding space. Rather than contributing to the displacement of control and coordination from plan to practice, we could argue that the meetings instead are instrumental in making coordination and planning slip out of the hands of the actors. With the bracketing of certain traditional issues we are thus left with the impression that partnering in this specific case, emerges as something that takes place *outside* of work and, in the hands of the observed managerial actualisation, is turned into an enclosure; an iron cage. An iron cage, not of rational, rule-based control, but of one-sided ideological interpellation that dissolves the hierarchy of authority and instead personalises or individualises responsibilities. We face a management rationality which operates on a principle of internalisation of power rather than direct command and control. Thus, when it is emphasised, in relation to the function of the new site meetings, that one should "…*not mistake learning for control*" (AlmenNet, 2009a: 13) it is a truth with modifications.

Next, I will discuss a specific actualisation of this internalisation of power through which the craftsmen are sought made objects for themselves, thus being able to manage themselves.

10.4 Ordering through normalisation

That partnering, in this form we have witnessed on the U2 project, takes place *outside* of work and is a somewhat structure-less and rule-less experience in contrast

to the space that surrounds it, might account for the apparent ambiguity, disorder and confusion as to what to do with the space opened up[38]. However, there is also another story to the events. Previously, I have argued that partnering can be conceptualised as a nullification of the traditional. Throughout the third part of this book I have given this notion more substance, arguing that this nullification has become manifest as an opening of a space of action or intervention. An opening that puts at stakes the traditional without inserting a new unequivocal point of reference, i.e. a norm towards which order is directed. I think this has been made clear in the previous chapter on the order of the site meeting and the struggles to make sense in the new space. In the present chapter, I will go further and account for how this principle of normalisation also can be found in the tools of management. Here it takes a shape that does not owe anything to a normative humanistic framework, but nevertheless succeeds in committing the craftsmen to the efforts of creating ownership towards the overall project.

Re-strategising ownership through benchmarking

In this chapter, I adopt the position of e.g. Triantafillou (2006) and Andersen and Thygesen (2004) that benchmarking can be understood as a distinct management rationality characterised by the idea of governance by self-governance. Speaking from the point of the 'organisation', Triantafillou (2006: 23) argues that benchmarking operates by explicitly making a best practice visible by means of normalising comparison. Normalisation in this respect refers to the process, in which:

> *"…a group (re-)produces and utilises the normal as starting point for the structuring of their negotiations and considerations on how to act. The normal is not a static entity, but is reproduced and possibly modified through the group's interactions." (Triantafillou, 2006: 27; own translation).*

In my eyes, this exactly encapsulates the events that unfolded at the site meetings as they were resumed after the summer holidays where work on-site had been more or

[38] This is also the case in the early phase of the project where the designers' and the contractors' collaboration is the central element. I will not discuss what happened in the early stages of the project apart from mentioning that here communality also played an important role. The establishment of a common project office (the U2 Base) where all team members could work together bears witness hereof. As is the case with the site meetings, team members however also expressed confusion as to the immediate instrumental benefits of this arrangement. In a so-called Partnering-Process-Indicator evaluation that was carried out, it was expressed that the participants experienced "*…uncertainty and confusion in the project group in relation to the distribution of tasks*" and that the partnering process is to demanding on the resources and that the same result could be achieved with fewer meetings and activities (cf. Ram-Pedersen, 2007: 72).

less at a stand-still. First, I would take the opportunity to point to the changes in meeting structure that took place during this break.

Table 25. Changes in the agenda for the new site meetings.

Original intended agenda	**Typically realised agenda**	**Revised agenda**
Summary from previous meeting (10 min.)	Administrative routines (5 - 10 min.)	Summary from previous meeting (5 min.)
Review of the project (10 min.)	Summary from previous meeting (2 min.)	Product evaluation/benchmarking (20 min.)
Safety (15 min.)	Project review/safety (20-30 min.)	Debate (20 min.)
Craftsmen's time/AMU themes (25. min)	Discussion (10-15 min.)	Forecast of the project (10 min.)
Topics for next meeting (10 min.)	Topics for next meeting (5 min.)	Safety (5. min.)
		Topics for next meeting (5 min.)

In the above table, I have provided a somewhat crude and certainly caricaturised overview of the a) intended, b) typically realised; and c) revised agenda for the site meetings. At first, the changes might seem minor – especially when presented in such a schematised fashion; however if we go behind the items and numbers, another picture emerges. Originally, the meetings were designed in such a manner that the first half of the meeting resembled the content and order of the traditional site meeting in that the participants would receive information on the current affairs of the work on-site as well as information on issues of safety. The reason for inclusion of the latter subject, which certainly is not a part of the 'traditional' site meeting, is according to the facilitators that safety is something that affects us all and something that everyone therefore would have a natural interest in. The second half of the originally intended meeting was targeting the involvement of the craftsmen – in that they were appointed coordinators of the activities here. Further, in order to receive financing from the AMU system, selected themes was to be dealt with, e.g. relating to plan/drawing comprehension, communication or scaffolding. What happened more often than not was that administrative routines took the upper hand at the beginning of the meetings, leaving only little time to summarise on the previous meetings. Furthermore, the project review and safety information typically translated into the previously mentioned discussions on mess, disorder and ownership. These topics were then carried through to the following 'Craftsmen's time/AMU-themes' features that consequently took the form of a discussion between the site management and a few of the most committed craftsmen. This changed after the summer break for one reason in particular – the conduct of an evaluation seminar in relation to the final meeting prior to the summer break. This scheduled evaluation focused three ways: a) on work environment and safety, b) on

communication and collaboration; and c) on personal/individual learning. Again I will resort to somewhat of a caricaturisation of the findings by highlighting just two of the results – one pertaining to communication and collaboration, the other to personal/individual learning. One of the most striking results of the evaluation was that as much as 55 pct. of the craftsmen had either no attitude towards or saw no benefit of the site meetings in relation to topics of communication and collaboration. As a craftsman put it:

> *"Craftsman: I believe the idea is good, but that the meetings are ill executed. Well, you have been following the meetings, and I believe that you also have noticed what has been happening. At one point we had a discussion and one of my colleagues told me: 'say, am I the only one who hasn't understood that you keep your mouth shut on these meetings?' […] You know it was the discussion with the container. Every time they said something it became their responsibility, and that's the most certain way to strangle a discussion – and since that, the meetings have been, you know…"*

Secondly, according to the evaluation 95 pct. of the craftsmen had been satisfied with their own performance in relation to the challenges met at the building site. These results could be interpreted in numerous ways. We could argue that the craftsmen's attitude towards the site meetings only is conspicuous in the light of the idealised intentions and that it represents a somewhat just critique of the meetings. As for the craftsmen's view of their own performance, we could argue that this represents either nothing more than basic human trait (let's call it self-complacency in lack of alternatives), avoidance of responsibility or ignorance of the expectations placed on them[39]. The two results taken together can, however, also give rise to the interpretation that the activities at the site meetings have been ill-suited in comparison to the intended purpose of the meetings. The overall programmatic goals with the meetings are thus difficult to find actualised in a form corresponding to the intentions. We can say that the craftsmen lack governance on how to govern themselves, and that the activities at first have been unable to support the movement towards responsibilisation. This was also realised by the management:

> *"Site manager: I don't think we have been good enough to translate the values from the work-shop to the Urban Mirror meetings. We have to be careful that the Urban Mirror not just becomes a place where we discuss problems."*

[39] Almost needless to say, there is of course also the possibility that the craftsmen actually have evaluated the expectations placed on them and judge that they have fulfilled their contractual and moral duties in full.

Accordingly, in order to involve the craftsmen further, the meetings were restructured and as part of the remaining meeting, an external evaluator was appointed. We recall the evaluator (NB) from the previous story on order and disorder, where he argued for the need to teach the craftsmen to educate themselves. His role was to test and implement a new system for process optimisation and product evaluation, which as its stated purpose aims at rendering the product values visible by measuring time consumption, quantities and prices. This measurement takes the form of a benchmarking of the performance of the different work gangs, as the measurements are based on inputs from the craftsmen's own *hut-books* (book of accounts), containing all relevant data on the gangs' time consumption and extra works on the different parts of the buildings. Hence, rather than seeing these books as mere documentation of time consumption, they are actualised as devises for coordination.

Let us start by reviewing how these activities were conducted. Prior to a UM meeting the external consultant would contact a gaffer from one of the five work gangs and together discuss what was expected from them in terms of what numbers to present and how to present them. The site management was put at the craftsmen's disposal should they need help transferring numbers to a spreadsheet and generating what was called 'good-looking diagrams'. None of the gangs used this option. After compiling and rearranging the data, the gaffers would then present the numbers to the other craftsmen at the UM meetings, thus actualising the element of making the craftsmen responsible for the meetings. Although this move managed to involve the craftsmen more in the meetings, it did not quite make the facilitators or site management redundant as we will see below; rather it made them more eager. The first of the redressed meetings thus saw the participation of two company directors from the contracting company. We should see this as testament of the importance of the benchmarking activities. The activities were structured accordingly:

1. Presentation of data (according to a standard format) for each building.
2. Comparison of results between buildings.
3. 'Good-looking' diagrams.
    a. Discussion: Is this something we can use?
4. What main tasks do we work with?
5. What are the foremost problems? (do we think)
    a. Discussion: What problems do the other gangs have?

6. What problem does the gang try to find solutions for?
    a. Discussion: What will each work gang do from here?

I will not dwell on the results from the different gangs, but instead look at one overarching theme in particular: the normalising aspect of the activities.

Normalisation, trust and control

Let me for a moment return to the question of displacement or delegation of control as addressed previously. I have argued that control in the logic of partnering is to be displaced or delegated from the sphere of centralised management to individual conduct in order to attain the necessary flexibility. Here I follow up on this statement, arguing that for control to be delegated we need to ascertain that the beneficiaries of control can be trusted. This is the function of normalisation at this project, as I see it. Hence, observe item five on the above agenda as it provides the basis for my reasoning: 'What are the foremost problems? (do we think)[40].' This is exactly how it was phrased at the meetings, and paraphrasing Foucault, the key here is the little statement…flat and bracketed: '*do we think!*' Accordingly, the purpose with the benchmarking exercises is neither to document the productivity or performance of the craftsmen, nor to "*reach behind the numbers and observe the causes to the numbers and the development*" as it was phrased by one of the company directors. Now, the reason as to why I dismiss the benchmarking activities as a mere question of documenting the performance of the craftsmen, thus gaining productivity improvements from learning and repetition effects, should be found both in the above statement, the subsequent discussions and finally the contractual governance frame between the company and the craftsmen. Beginning with the latter, we should take note that all piece rates already had been negotiated by the time of these activities, and could not be made subject to changes. Furthermore, the different blocks of flats differ quite a lot from one another due to the extensive number of additional choices made by the tenants as a result of the 'Renew Your Home' campaign. Asked whether the craftsmen could use the benchmarking exercise, and for what, a craftsman stated:

> *"Craftsman: Well, take for instance the end walls. It is important that they fit 100 pct. […] What he [the external facilitator] is up to, is to be able to calculate the costs of one square*

[40] In Danish, the item on the agenda read: "Hvad er de væsentligste problemer? (tror vi)"

meter of façade. However, I can tell you one thing for sure, and that is that it depends on what type of façade we are dealing with – and who makes it. Well, it'll be interesting to see…well, the more knowledge we have about the lot…I mean, it can hurt us, I guess."

With this being said, it is however also important to remark that the benchmarking exercise is a part of the 'social housing sector's' larger efforts in developing a common systematic model for the evaluation of new development initiatives being tested on social housing projects in order to increase the value creation in the building process. Further along this dimension, we observe that the benchmarking activities are not aimed at reducing expenditures and optimising productivity. As previously shown, certain 'traditional' disciplinary issues are bracketed. Hence, at the meeting the management still refused to discuss specific solutions at the expense of attitudes:

"Craftsman A: Of course there are problems with the scaffolding. It can never be avoided due to the different rhythm of the gangs. However; it could be interesting to see when these different rhythms collide and make suggestions to minimise the nuisances hereof. Can we take this discussion?

External facilitator: Allow me to turn off this discussion of the scaffolding and all these problems, because we have limited time here. We can discuss that at the weekly planning meeting.

Craftsman B: Well, I would like to have an answer to the question!

Site manager: I will just say then, that [assistant site manager] had been asked to present an overview of the scaffolding economy today; however chose not to do so after all, as we rather would focus on the experiences you have made."

Thus, once again we observe that rather than providing the opportunity for finding specific solutions, discussing specific details and conducting exact planning, the meetings instead emerge as a space in which the road is paved for solutions outside the space. We could say that the meeting is functional in relation to the space that surrounds it. However, even though the events outlined above still take place outside of work, the reason for the success in including the craftsmen into the discussion should in my eyes be found in the fact that practical work, the normal, is used as basis for interaction. We have a situation where the participants can observe their own work and roles within the larger organisational frame. Ownership can

now emerge as a meaningful concept in the context of the craftsmen's work practices.

Returning to the normalising aspect of the benchmarking exercise, it is evident in the light of how item five was handled at the meeting, where the discussion basically turned into a debate on claims of truth. The management thus maintained that the craftsmen perception of the problems were of the form '*what you think are problems*' whereas the management possessed knowledge about '*what actually are problems.*' We can observe this best by referring to the statements from both sides. Using the data on time-consumption in the building of six blocks of flats, the craftsmen proposed the following reasons to the problems in achieving repetition effects:

- Discontinuities are time-consuming and have lasting effects.
- Additional extras takes a long time integrate into the rhythm of the work.
- Lack of materials.
- "The recurrent scaffolding problem[41]."

Especially the issue with the scaffolding gave rise to discussions. The management, being tired of hearing '*the same song again and again*', suggested that the craftsmen then should make entries in their logbooks every time a scaffolding problem occurred:

> *"Site manager [continued from above]: I would like to close this scaffolding discussion, which is a sort of a perennial issue. I have recorded here that a logbook will be placed in each hut, and every time there is a problem, any problem, with the scaffolding I would like you to record it and tell me about it.*
>
> *Craftsman: Could you give us five logbooks each then?*
>
> *Site manager: You can have a million if you want to. I hear some stories I have heard again and again. I would like to have the latest stories instead. Not something in the past tense all the time.*
>
> *[…]*
>
> *Site manager: Now, I place these logbooks in your huts, and then we can start counting and see what problems actually exist!"*

[41] As phrased by a craftsman. Problems with the scaffolding were issues that had been discussed at the UM and weekly planning meetings just as extensively as the mess in the Carl-F container. In essence the problem was according to the craftsmen that the scaffolding (large platforms) didn't quite fit in dimensions to the buildings, giving rise e.g. to safety issues as well as production problems.

After the meeting the management group assembled and discussed the issue of scaffolding, arguing that to their knowledge there have not been any problems with the scaffolding, neither in terms of production nor safety. However there was a belief in that the logbooks would "*give correct view of the matter*[42]" to the craftsmen, making future discussions revolve around facts rather than beliefs. The rationale behind this thinking is clearly that the management sees itself as more knowledgeable than the craftsmen on the affairs of the project. I therefore contend that we should see these activities as an attempt to install the management's ideals and rationales into the minds of the craftsmen – or put less bluntly, to create a common basis for decision making in an attempt to ensure predictability in decisions. In this way, decisions would be more or less the same no matter if taken by the management or the craftsmen. We can refer back to the previous discussion on the bracketing of the traditional to see where we are heading. The function of normalisation can be seen as a process of eliminating the unrealistic expectations that the management clearly ascribe to the craftsmen. The idea that if a common basis and a common frame of reference can be established, we can have trust in the *Other* seems to be the rationale. However, it is also evident that instead of taking a command and control perspective, the management sees as its role to reason with the craftsmen; to educate its flock. This, I believe, is testament to the presence of a form of control exceeding the *carcèral* technologies of the disciplines. A form of control that takes as its starting point, not the ideal norm of optimisation (with its prescription of means and ends), but *effective reality*. Hence, as the management at a subsequent meeting documented that only two scaffolds had been moved too late according to the plan, and the craftsmen on their side (by use of the logbooks) documented actual problems with the scaffolding, the facilitators and the external evaluator could introduce the notion of using these types of 'informed' discussions as learning arenas:

> *"External evaluator: I hope you can follow the methodology at this early stage. At the previous meeting we discussed that the scaffolding was a problem – and instead of just arguing for the sake of arguing, we closed the discussing and said: well, let's have information. Today we have the first numbers. I don't know if you can feel it? But don't you feel that having information on 'how' and 'what' makes the discussion much more specific? That the discussion changes from 'someone' to 'you' and 'me' making it possible to help each other solve*

[42] As stated by a company director at the after-meeting.

problems […] what I aim at accomplishing is that we can use this knowledge as we move on [to the next segment of the project]; that it is the best results we use, whether it concerns scaffolding or logistics or other things."

Limitations and the double-edge of normalisation

One thing is however to have the intentions of using these types of meetings to create learning arenas, another thing is actually be able to do so; to create the space for the actualisation of learning. I suggest we can say that we in the previous storylines have witnessed partnering actualise as a battle between *status quo* and *reform*; between dispositives of rationalisation and negotiation. We can however also say that it is an uneven or even 'fixed' battle where negotiation had the upper hand through its pre-conditioned bracketing of the traditional, disciplinary complex. In this battle, the intentions with the return of building customs and practice were never allowed to surface and be able to gain a foothold. We could claim that the romantic idea of *reintroducing* building customs and practices is naïve from the outset. Rather, efforts should have been directed towards understanding the possibilities for as well as limits to the *actualisation* and *re-strategising* of building customs and practices in this space of intervention. As such, if the benchmarking activities can be seen as efforts towards establishing a normative ideal of the knowledgeable, self-governing craftsmen, we could fear that we instead have observed a process of minimising the unwanted through installing a managerial understanding into the minds of the craftsmen. Hence, a question that still remains, and to which we only can speculate an answer, is whether this process of creating ownership and responsibility we have observed provides the means necessary to create the sufficient conditions for self-governance.

With Tynell we could ask, if the craftsmen only are self-governing on a tactical level; if they are proclaimed: "*…autonomised and made responsible for their own working conditions, the satisfaction of the clients, and for their own economical profitability.*" (Tynell, 2002: 17; own translation) without having the necessary influence. A key issue in this respect seems to be the rather abstract actualisation of the process of normalisation. On the one hand, we have a situation where the craftsmen are beseeched to participate; to provide inputs for the discussions, but where work-related issues are bracketed. On the other hand, we have the craftsmen who voice their principle interest in participating, but are not given the opportunity to find themselves in the process. We could say that the craftsmen are called upon or

interpellated as autonomous individuals, but do not become *entangled* (Bojesen, 2008) in the space of normalisation where the collective is the responsibility of the individual. The reason for this is that they are not provided the means to recognise themselves according to the call of the organisation (Bojesen, 2008: 57).

To become entangled, the element of materiality seems important: Materiality, however, not as an abstract concept, but in a very mundane and practical form. The craftsmen identify themselves in accordance with an affiliation with a specific building material, as is their practices moulded over this affiliation. Materials are signifiers in the identification process, and for the craftsmen to be actively entangled they call for this to be provided. By and large, we can say that the crafts still to large extent operate on the premises of the medieval materials. The craftsmen can improvise, coordinate and make variations; i.e. master the process, when using these materials. However, when facing 'new' materials or system products they reach the limits of their practical rationality. New materials and products have the planning and coordination embedded into them, making the craftsmen unable to make alterations and adaptations singlehandedly. As one of the experienced craftsmen phrased it at the final meeting on site:

> *"Craftsman: Wouldn't it be possible to give us a course in new materials? I mean, this is the first time I work with anthracite. We know what to do with spruce, but what can the other materials tolerate?"*

We can say that the conditions for a return (re-strategising) of the idea of building customs and practices, and thus the displacement of control and coordination in order to promote flexibility, critically depends on that these (mundane) issues are not bracketed off by the programmatic statements about attitudes, ownership, etc. One thing is thus to renounce the 'traditional' and instigate a new order, but if this takes place at the expense of the recognisable, identification becomes impossible as the craftsmen are not able to effect by their own means a certain operations on their conduct (Foucault, 1988). Hence, for these initiatives to become more than *technologies of domination* we must consider how to make room for the craftsmen as well.

This, however; is not a utopian ideal. We can see that not only the craftsmen but also the management are subjected to this logic of normalisation and are affected by it. Returning to the issue of the logbooks and the scaffolding it e.g. turned out that

the management's perception of matters was just as flawed as the craftsmen's. Thus as the site manager admitted:

> *"Site manager: When I'm standing up here…what I notice is that we, as a building project, perhaps aren't good enough to involve those who work on the scaffolding. I mean that is what I hear. That the site management hasn't been good enough to do so […] now we have made the logbook and that is in order to be able to discuss facts […] but it might also be a good idea to let those who think they have some 'repressed' knowledge discuss these matters with us: What can we improve? How can we meet each other in order to optimise these details? […] Well that's the introduction – let's appoint someone, a committee, who once in a while can discuss what to do and what to improve together with the site management."*

Hence, not only the craftsmen, but also the site management can be said to be influenced and 'shaped' by this technology of normalisation that is actualised in the space of the site meeting. We see that the managers, by route of the external evaluator's intervention, realise that they cannot uphold the illusion of omnipotence; that they do not know themselves as much as they thought and consequently are made objects for the gaze of normalisation. With this, I claim we can see not only the contours of an intended *delegation* of control, but the very fabric of the *de facto displacement* of control. It is a *de facto* displacement that is neither *by* the subjects nor *in the hands of* them. The management has to use negotiations over the normal as basis for their actions, as they can no longer trust their own judgements. Even the change in meeting structure and contents clearly signalise that the conditions of management have changed; that the traditional command and control style no longer can be maintained. In that instance, a Friday morning at a building site on Amager, a turn was marked; the striated sociality crumbled finally as the management, looking into the mirror, recognised their limitations and acted accordingly.

At this point I will end a dissertation that I hope will serve as inspiration for future studies in the area of planning and management in construction.

Part IV: Conclusions and implications

11. Conclusions and implications

The examination of the constitution and functioning of partnering has now been completed. I have set out by proposing the below research problem as the entrance to the discussion of partnering:

How can we understand partnering and the order it produces,
if we are to embrace the thoroughly polyvalent qualities of the concept?

I have followed this problem throughout the three main parts of the dissertation by use of a *Foucauldian* strategy of analysis giving attention to questions of constitution, configuration and order, i.e.: a) the conditions under which has partnering come into being, b) the form in which form has partnering come into being, and c) the processes of order that partnering produces and how this order is handled in a specific social event. It is now time to conclude on the findings – a task which falls in two parts concerned with the specific research questions respectively the implications of the approach adopted throughout the study.

The constitution of partnering

Although not stated explicitly as a research question or declared purpose, the work revolving around the attempt to provide an understanding of the dispositive in the first part of the dissertation has played a prominent role in the study, and should perhaps retrospectively have been designated as a purpose in itself. One could argue that the choice of theoretical perspective, not least the use of the notion of the dispositive, in itself is an answer to the question of how to understand partnering avoiding the reductionist trap (and in the process falling into another). Thus, and to redeem this apparent discrepancy, I will start the conclusion here.

The treatment of dispositive

According to Raffnsøe (e.g. 1999; 2003; 2006) and Jensen (cf. 2005a) the dispositive emerges as an overarching or concurrent theme throughout Foucault's writings; that the dispositive is:

> *"…the basic, transformative structure that runs as an undercurrent throughout the oeuvre; however without becoming subject for thematically treatment." (Raffnsøe and Gudmand-Høyer, 2004: 29; own translation).*

On this basis, I have attempted in the first part of the dissertation to provide a treatment of the dispositive as an analytical abstraction, including its methodological premises and historical nature.

First, I have demonstrated how the dispositive analysis can be seen not as a replacement for what is often referred to as Foucault's *archaeological* and *genealogical* methods, but rather as an analytical extension and re-orientation hereof. Most notably in this respect is the elucidation of Foucault's own arguments that the methodological considerations, most explicitly delivered in the *Archaeology of Knowledge* (*AK*), by no means are confined to the analysis of discourse and the *episteme*. Illustrating that *archaeology* analyses discourse at the level of the discursive practices (which includes the non-discursive) and that the *AK* contains sophisticated views on topics of change and transformation, I demonstrate how the dispositive is present at this stage in Foucault's writings – as is the concept of the intricate relationship between power and knowledge. I furthermore point to the central position Foucault gives to historical conditions (the *historical a priori*) as the fundamental basis of the archaeology – a basis which also the *genealogical* analysis shares and accentuates further. On this basis, it is shown that the historical a priori emerges as the horizon to which the description of discursive formations belongs. Though history is the proper domain of Foucault's writings, it is shown that we are not dealing with traditional historiographic methods or occupations. Foucault's project is neither monumental nor antiquarian; rather it is a critical life serving historiography that takes as its starting-point that the past must be broken up and annulled in order to allow the living to exist (Andersen, 2003). As such it is a history of the present by means of historical awareness of otherwise forgotten or subjugated knowledges and practices. With this understanding, I have then discussed the dispositive analysis being strongly influenced by e.g. Raffnsøe's interpretation and operationalisation hereof. Here the dispositive analysis emerges as an unmasking of how a complex social exchange constitutes, runs through, and changes a society's central institutions. In doing so, social exchange is analysed from the point of historical change and transformation; as interplay between different dispositives employed throughout the history of sociality. As such has partnering been analysed throughout the book.

The emergence of partnering

The argument that "…*a such, in the social relation inherent, rationality only really can be uncovered if one examines the history of emergence this of logic*" (Raffnsøe and Gudmand-Høyer, 2004: 29; own translation) provided the basis of the first research question and thus purpose of the study: to examine under which conditions partnering has come into being. Throughout three chapters in the second part of the book I have demonstrated how partnering can be understood by bringing to attention the trajectories that have been 'ploughed in the sociality of the building sector' and have shaped current practices. In doing so, I have worked with transformations taking place between three dispositives, being:

– building customs and practice
– rationalisation
– negotiation (partnering)

The analysis starts by exploring the notion of the 'building sector' in the medieval and pre-industrial eras, using the figure of 'building customs and practices' as the diagrammatical point-of-entry. The guild and crafts-based roots of the building sector is then discussed with special emphasis on the management and organisation of work. Here it is demonstrated that guilds as an institution represented a form of organised community in relation to a specific craft, and that the guild statutes comprised a constitution of the sociality of craftsmen with guidelines for the conduct, norms, and practices of belonging to a community and being a craftsman. It is argued that apprenticeship, and the close relation to a specific type of building material within a craft, was instrumental in ensuring *coherence* as the governing principle in a sociality predicated on a variety of different practical rationalities and performative practices.

From here I have proceeded to discuss how the gradual emergence of 'the building sector' instigated a process of unification by functional differentiation. The leitmotif in these efforts was the scientification of the art of building; a process which to a great extent was driven through by the state in its newfound role of *public construction client*. The public construction client, indeed the notion of 'the construction client' as such, is to be seen as a result rather than an origin. With this I mean, that the client as an active player accorded to intervene in local practices of building, was made possible due to the general societal shortages in the wake of the Second World War, as an urgent need for the development of the physical

infrastructure arose. The strategic imperative acting as the matrix for a new dispositive of building was that of rationalisation and would, as Villadsen (2004) phrases it, take the form of the schematic "correspondence/divergence" – a schematic that at one and the same time *shapes* and *is shaped by* the practices of building (*Ibid.*, 2004). It is shaped by the practices of building in that the rationalisation efforts first and foremost took as its starting point the early notion of building customs and practices. It accepted every *individual* element of the existing complex of building; however only to subject these to an all-encompassing or omnipresent gaze of stratification, normation and correspondence. In this process of strategic codification elements were emptied; were stripped of content bar their 'name' in order to be prepared for this schematisation – a schematisation that can be observed in its most diagrammatic form in the phase model. The schematic also shaped the practices of building. Bricks, bits and pieces were standardised and modularised and different actors were continuously shaped and reformed for them to be able to claim a specific place in the sociality of the sector. The client's demands for fixed price and time prompted the architects and engineers to safeguard their work, transforming the architect from shop steward to adversary. The technical development coupled with this functional differentiation deprived the building sector the skilled craftsman, and *uni-directional coordination and control* emerged as the nexus between the different parts of the apparatus.

The 1990s onwards saw the rise of a re-activation of the sociality of the sector; a re-activation that, based on the problematisation of the phase model, was mediated by a different regulatory governance strategy than in the 1940s onwards – being a governance strategy founded on governmental development programmes and active experimentation rather than on legislation and direct decrees. A governance strategy in which what we today would call 'results' (most prominently partnering) emerged as outcomes of processes of attachment and assemblage rather than of top-down strategy implementation. Retrospectively observed it can be argued that the sectoral stratification efforts of the 1950s onwards had been so successful that it had resulted in a de facto lock-in situation in which the uni-directional and unequivocal circumscription of space had deprived the individual actors any room for maneuver for agency. Partnering in respect can be seen as an attempt to *smooth* out the stratified space of building. It has been demonstrated how partnering can be observed as an assemblage that takes as its starting point the simultaneously representation, contestation and inversion of the *disciplinary* way of thinking building

practice and governance; the attempt to break-down functional differentiation and its derivative – the focus on central control and coordination. And instead of applying a totalising or unifying gaze on the 'building sector' the multiplicity of the phenomenon is accepted in trying to connect the different parts at the same time as it separates them from others Bojesen (2008: 21). Hence, with partnering we face a situation where engineers, architects, clients, craftsmen, technologies, plans, materials, etc. as functional elements are accepted at face value only to be subjected to a process of negotiation in which the different parts of the apparatus are aligned with a view to a future that is not exactly controllable rather than to a static perception of perfection according to an *ex ante* norm of optimisation (Foucault, 2007: 20). I have thus argued that partnering has emerged as a nullification of the dispositive of 'rationalisation.'

The configuration of partnering

This idea of a nullification of the dispositive of rationalisation bears with it the key to the second research question concerning the form or anatomy of partnering, i.e. the conditions for the linking together of some components as functional elements in partnering. The idea here is that instead of resorting to reductionism and trying to freeze partnering as a specific form, we should be able to understand it as a polyvalent phenomenon open for change and transformation, yet within the same strategic logic. With the dispositive analysis we thus situate an idealised pattern or systematic of social interaction as our centre of attention. This pattern, has at times been referred to as a logic of exemptions and at other times a negotiated practice. With the first, I refer to the fact that partnering in the form of "…*a strategic codification of power relations*" (Jessop, 2007) emerges as a series of exemptions to the *juridico-disciplinary* complex of governance mechanisms. We have the exemptions to e.g. the tender circular and the general conditions, the possibilities of choosing work partners instead of having them imposed, and economic incentives instead of fines to name but a few. This logic of exemptions opens a space for intervention in an otherwise enclosed sociality – an opening that first and foremost depends on the possibility of being able to tailor responses to the task in hand by negotiating on a local level. As such I have also argued that negotiation emerges as a new rationale or underlying principle of socialisation. I think this pattern is apparent in a series of initiatives promoted in the Danish building sector these years. An example not covered in this dissertation is an initiative from the Danish Association of

Construction Clients entitled *pre-acceptance of work* (AlmenNet, 2009b; own translation), where the basic idea is:

> *"…that the different parties of the project, in due time before the formal project hand-over, together review the current stage of production and agree on the further progress […] the suggested solution does not entail any contractual changes, but focuses on establishing a more thorough procedure than otherwise seen today. The new process is thus a re-introduction of previous time's more thorough practice concerning the acceptance of work."*

Whilst not described as a 'partnering element' or otherwise related explicitly to partnering, we can nevertheless see this initiative as operating on the same principle of exemption and negotiation; as yet a testament to the existence of a new predominant rationality embodied most notably in the guise of partnering. In this light, we can say that partnering is an open condensation of elements that seem to counteract the principle of stratification and the unwanted consequences of the phase model. We could turn this argument around and say that partnering as a *logic of exemptions* is able to take aboard anything and everything, which opens a space of intervention in relation to the existing representation of the sectoral lock-in. As such partnering operates as a mechanism for opening up a space of intervention. With this notion in hand, the next question is then what this opening actualises in practice.

Actualisations of partnering

Even though we would say that a new dispositive; a new pattern of organisation has emerged, we are not in a situation where we can claim that it is totalising or has eradicated other, previously predominating dispositives. Thus, where the *dispositive of rationalising* did not eradicate, but rather superimpose or re-strategise the relations of the *dispositive of building customs and practices*, the *dispositive of negotiation* 'simply' re-strategises these relations again. We are thus in a situation where we can say that contemporary social building practice is located in a triangle of action. On the most general level of observation, I believe that when we observe what partnering produces on a local project, we are in the first instance met with the answer that partnering produces a space. With space I refer to a situation, where it is possible to actualise *certain* discursive formations and non-discursive domains in practice in a specific social event. Thus, in the second instance, and being more specific, I would say that partnering produces a space filled with a variety of social technologies that help actualise thought-representations of a new social order – and that this

demonstrates the insufficiency in applying an instrumental rationalist perspective on the study of partnering.

Throughout the third part of the dissertation I have demonstrated various facets hereof. I have shown how the 'macro-strategic' opening of space, seen as an attempt at smoothing out the stratified space, constitutes a movement *away* from safeguarded *juridico-disciplinary* mechanisms. When I stress the aspect of moving *away*, the reason is that the participants of the project have difficulties articulating what it is a movement *towards*. I think that the central concern in this respect is how this movement is best seen as a bracketing of certain central elements of the traditional *juridico-disciplinary* complex. Hence, I have pointed to how e.g. hierarchy and centralised coordination and control have become problematic. That the normative ideal of uni-directionality, unequivocality, and the single-point of control we found as characteristic of the dispositive of rationalisation is forsaken in favour of a seemingly non-obligating and networked sociality that has as its 'bond' or organising principle the idea of the responsible individual; i.e. individuals taking responsibility not only for themselves and the detail, but also for the *Other* and the whole.

This is especially evident at the kick-off workshop, which is the first of several social technologies actualising partnering being analysed. Here I illustrated how the workshop displayed *heterotopic* qualities, i.e. how it can be seen as an attempt to programme a new order that is to reach into the fabric of the project by illustrating possibilities for exceeding the sedimented social order. From here, I then traced various actualisations hereof in the sphere of the daily project pointing to the intentions of substituting technical rationalism for normative humanism as the principle of a new governmentality.

It was shown how the project participants were called upon to create themselves in this process that however failed to actualise an element of recognisability, thus breaking the promises of a new ideal order. Instead of contributing to the delegation of control and coordination, championed by the notion of the return of building customs and practices, the efforts rather threatened to result in a loss of control and coordination. This is argued to be the result of the constant bracketing of elements related to practical building activities. Planning could thus not be discussed at the site meetings, and with the kick-off workshop we clearly see how far this 'other space' is from the 'real sites' of construction.

I however also demonstrated the polyvalence or micro-diversity of social technologies employed in this space of partnering in order to smooth out the

inexpediencies of the stratified. Drawing on the notion of *normalisation*, we can see how the benchmarking activities conducted on the project can be seen as an actualisation of a governmentality exceeding the previously predominant technical rationalist principle of *normation*. Equally interesting is it that this principle of normalisation proved far more pervasive than was envisioned, as the management, and not just the craftsmen, was subjected to this principle. This I argue can be seen as testament of a sociality quite different from that characterising the *juridico-disciplinary* conception of the sector. A sociality necessarily based on negotiation rather than on uni-directional coordination and control.

Studying partnering, studying concepts…

In the introduction I claim that we should pay attention to the processes of coming-into-being if we are to avoid ontological reductionism and be able to accept in all its multiplicity, diversity, or polyvalence the world as we encounter it. The argument behind all this can be said to be rooted in a key-issue of postmodernist studies; that notions of having certain knowledge and the existence of essentialist objects or subjects cannot be maintained. Instead we should substitute fixation for contingency, question what we normally would take for granted, and acknowledge the wider systems or domains of social relations, knowledges etc. that influence the shaping of a given social sphere. In this respect, not claiming superiority of one perspective over another, we could argue that the *real* question of this dissertation has been how to use a different perspective on the analysis of concepts and processes of management and organisation than is normally seen within the field of construction management. Take as starting point the following statement:

> *"…a concept must remain ambiguous in order to be a concept. The concept is bound to a word, but is at the same time more than a word: a word becomes a concept when the plenitude of politico-social context of meaning and experience in and for which a word is used can be condensed into one word." Koselleck (1982: 419).*

In retrospect, I would say that this in essence is what I have sought to accomplish in the course of this book: to discuss partnering as a condensation of a plenitude of politico-social context of meaning and experience. The consequence of this kind of thinking is an acceptance of the premises that:

– the shaping of concepts is not a simple surface phenomenon
– the constitution of a concept is a semantic battle about the political and the social

– a concept has to be seen as the condensation of a wide range of social and political meanings
– concepts are thoroughly historical objects

What I try to imply hereby is that instead of studying how an essentialist concept is *used* by essentialist actors in order to reach certain ends (using e.g. the notion of emergent strategies as explanation of deviations from the intended) we could benefit from applying another perspective. We could thus learn a lot from discussing how individuals are constituted as subjects by a concept, which exerts its influence by formatting a space for intervention – if nothing else then for providing different insights. One of these different insights provided by applying Foucault's analytics of the dispositive is the intricate relationship between power and knowledge and the understanding that knowledge is created simultaneously with objects and subjects in discourse. Another insight is the suspension of the tension or dichotomy of macro- and micro-power, which carries along with it some misconceptions that in my eyes are quite prevalent in the field of 'sociological' construction management. Refraining from identifying and providing specific examples and instead staying on a level on general problematisation, I will discuss an aspect hereof below.

Hence, an often encountered wonderment or basis of inquiry into the workings of the construction industry is the claim that many development initiatives aimed at improving the sectoral productivity have been conducted but that the results and experiences herein newer have been used and utilised. We can find wonderments concerning the limited knowledge about main trends and concepts among practitioners of the sector, and that practitioners only seldom read the published reports. We can also find research suggesting that one of the reasons as to the lack of progress can be found in the fact that the persons participating in the sectoral development do not work on site at project where the knowledge can be put at work. On the contrary, I have argued for a less instrumental understanding of development programmes and concepts. It might very well be that practitioners have no first hand knowledge of the content of the various reports; nevertheless I think we could say that we rather face a situation, where the practitioners – the craftsmen, architects, engineers, clients, indeed whole projects are formed in the image not only of specific concepts and development programmes but also of the history they bring with them; to all the breaks, ruptures, exclusions, struggles, and forgotten practices (Villadsen, 2002).

Finally, and relating to the title on this closing chapter, I will therefore advocate for the need of placing more focus on context and contingency within the field of construction management as also Bresnen and Marshall (2000a) suggest. More precisely I believe focus should be placed on studying management and organisation *in* construction rather than on the management and organisation *of* construction. In this perspective, our attention should be directed towards understanding the conditions for management, thus moving beyond the traditional instrumental, 'means-end oriented' rationality that characterises much construction management research. This, however; in no ways entails a condemnation of the notion of instrumentalisation. I believe that I throughout this dissertation have demonstrated that instrumentalisation is a necessary and indeed unavoidable constituent of social exchange in general and management in specificity. What I however, dissociate from is the belief in the benefits of applying a perspective of 'unabridged' instrumental rationality in managerial practices. On the contrary, managerial reflexivity is paramount if we are to free ourselves from the objectivising perspective of instrumental rationality that "…*unquestioningly assumes and is grounded in the 'rightness' of […] elements of the managerial rhetoric of contemporary organization*" as Cairns (2008:285) phrases it. An implication hereof is that the central question in relation to the act of management (and also the study of management) becomes one of how to frame and design the conditions for acting upon the acts of others. This is in essence what governmentality implies, and what I have attempted to demonstrate throughout the dissertation.

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(Excerpts from the evaluation committee's assessment)

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